BAYVILLE VILLAGE CLEANERS
SITE NUMBER: V00220
290 BAYVILLE AVENUE
BAYVILLE, NASSAU COUNTY, NEW YORK 11709

Periodic Review Report

Prepared for:

Thomas Ryan, Volunteer

Voluntary Cleanup Agreement: W1-0848-9903

Prepared by:

CASHIN TECHNICAL SERVICES, INC.
1200 VETERANS MEMORIAL HIGHWAY
HAUPPAUGE, NEW YORK 11788
(631) 348-7600

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CERTIFICATION STATEMENT

I, Francis Cashin III, P.E., certify that I am currently a registered professional engineer in the State of New York and that this Periodic Review Report (PRR) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10).

For each institutional or engineering control identified for the Site, I certify that all of the following statements are true:

• *The inspection of the Site to confirm the effectiveness of the institutional and engineering controls required by the remedial program was performed under my direction;*

• *The institutional control and/or engineering control employed at this Site is unchanged from the date the control was put in place, or last approved by the Department;*

• *Nothing has occurred that would impair the ability of the control to protect the public health and environment;*

• *Nothing has occurred that would constitute a violation or failure to comply with any Site management plan for this control;*

• *Access to the Site will continue to be provided to the Department to evaluate the remedy, including access to evaluate the continued maintenance of this control;*

• *If a financial assurance mechanism is required under the oversight document for the Site, the mechanism remains valid and sufficient for the intended purpose under the document;*

• *Use of the Site is compliant with the Declaration of Covenants and Restrictions;*

• *The engineering control systems are performing as designed and are effective;*

• *To the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the Site remedial program [and generally accepted engineering practices]; and*

• *The information presented in this report is accurate and complete.*

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Francis Cashin III P.E., of Cashin Technical Services, Inc. located at 1200 Veterans Memorial Highway, Hauppauge, New York 11788, am certifying as Remedial Party's Designated Site Representative that I been authorized and designated by the Site Remedial Party to sign this certification for the Site."



_____P.E.

January 31, 2020 DATE

1.0 PURPOSE

Cashin Technical Services, Inc. (CTS) on behalf of our client Mr. Thomas Ryan has prepared this Periodic Review Report (PRR) in accordance with the approved Site Management Plan (SMP) dated June 22, 2018. Sampling and monitoring activities were performed on October 22, 2019 at the Bayville Village Cleaners (herein referred to as the Site), located at 290 Bayville Avenue, New York (Voluntary Cleanup Agreement # W1-0848-9903, Site # V00220). This PRR also includes off-site sampling results which were performed at the southern adjacent residential dwelling located at 3 17th Street, Bayville, New York to determine if there is residual contamination emanating from the subject Site.

The scope of work performed at the subject Site included the following as required by the approved SMP: 1) Interior vacuum test points and VOC gas measurements; 2) Sub-Slab Depressurization System (SSDS) air sampling; 3) Indoor and outdoor ambient air sampling; 4) Exterior subsurface soil vapor gas sampling; 5) Groundwater monitoring and sampling of four, 4-inch diameter wells; and 6) Sub-Slab soil, indoor and outdoor ambient air vapor gas sampling at the southern adjacent residential dwelling.

Specifically, extracted soil vapors were monitored to evaluate the effectiveness of the SSDS and to check for carbon vessel breakthrough. Monitoring included screening the influent and effluent air sampling ports with a photoionization detector (PID) and collecting influent and effluent samples using six-liter Summa® canisters with eight hour regulators.

Although this is the first PRR, CTS performed additional sampling/monitoring on December 27, 2017 and May 18, 2018 as part of the Final SMP. Those results are included in this PPR for the inception of trends in contaminant levels.

This PRR specifically includes discussions, charts, maps, and associated appendices detailing the following:

- Identification, assessment and certification of all ECs/ICs required by the remedy for the Site;
- Results of the required annual Site inspections;
- Completed Site management forms;
- Data summary result tables along with the applicable standards;
- Copies of all laboratory data sheets; and
- Overall Site evaluation.

2.0 IDENTIFICATION, ASSESSMENT AND CERTIFICATION OF ALL ECS/ICS

2.1 Engineering Controls (ECs):

1. Vapor Mitigation System: The SSD System was installed with the following components:
   a. A RadonAway fan (Model RP265c) was installed to induce negative pressure to the sub-slab region beneath the one-story building.
   b. The extraction point for PCE vapors was installed in the center of the building, beneath the building slab, to capture all vapors.
   c. Interconnecting piping consisting of three and four-inch diameter schedule 40 PVC was utilized to install the SSD System. Four-inch PVC piping was installed from the sub-slab extraction point, extending to above the suspended ceiling, and then connected to the fan utilizing flexible couplings. The four-inch piping was then extended from the fan to the southern exterior wall. The piping then penetrates the wall whereby a reducer fitting extends three-inch PVC piping into a 55-gallon drum containing granular activated carbon (GAC). The GAC Vessel is located outside the building along the south side. The purpose of the GAC Vessel is to treat the effluent gas prior to discharge to the atmosphere through a three-inch exterior mounted stack pipe. Sampling/monitoring ports were installed on the extraction piping (influent side) and after the GAC vessel (effluent side) for monitoring vacuum, flow and contaminant concentrations.
2. Other Engineering Controls: Sealing of the concrete floor - The concrete floor was evaluated to eliminate any other sub-slab transport pathway (i.e. cracks in the building floor). All possible routes were sealed off to prevent the entrance of soil gas and to enhance the sub-slab negative pressure field of the SSD System.
3. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the declaration of covenants and restrictions (DCR), which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
4. Periodic certification of the institutional and engineering controls listed above.

2.2 Institutional Controls

1. Declaration of Covenants and Restrictions - Current and Future Use of the Site: Permitted future uses (commercial and industrial) must comply with 6 NYCRR 375-1.8(g)(2)(iii) for commercial uses; and 6 NYCRR 375-1.8(g)(2)(iv) for industrial uses A copy of the Declaration of Covenants and Restrictions (DCR) and its recording page was recorded with the Nassau County Clerk's office on March 17, 2017;The property may be used for: commercial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;

2. All ECs must be operated and maintained as specified in this SMP;
3. All ECs must be inspected at a frequency and in a manner defined in the SMP;
4. The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Nassau County Department of Health to render it safe for use as drinking water or for commercial purposes, and the user must first notify and obtain written approval to do so from the Department;
5. Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
6. Data and information pertinent to Site management must be reported at the frequency and in a manner as defined in this SMP;
7. All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
8. Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
9. Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;
10. Access to the Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Declaration of Covenants and Restrictions;
11. The potential for vapor intrusion must be evaluated for any buildings developed on the Site, specifically within the IC boundaries; and any potential impacts that are identified must be monitored or mitigated. The IC boundaries for this Site encompasses the entire subject lot as depicted on the survey map provided in Figure 7; and
12. Vegetable gardens and farming on the Site are prohibited.

2.3 Site Evaluation

During the annual sampling PRR event, CTS inspected the discharge pipe of the SSDS and it was clear of obstruction. The general system piping was also observed to be in good working condition and the RadonAway fan was properly running. CTS disconnected the negative pressure tube and the alarm sounded as appropriate. Negative pressure was recorded indicating that the active fan is operating properly. Replacement of the filter media is not required at this time but will be evaluated again in during the next PPR sampling event in 2020. The 55-gallon drum of purge water is full and is scheduled to be properly disposed of by a licensed environmental contractor. The subject Site building inventory questionnaire was completed and all chemical products inventoried with associated MSDS sheets provided. The off-site (Southern Adjacent Residential Property) inventory questionnaire was also completed with appropriate site sketches.

3.0 SAMPLING SCOPE OF WORK AND RESULTS

3.1 Interior Vacuum Test Point and VOC Gas Measurements

CTS measured four interior vacuum test points for negative pressure below the building slab utilizing a Magnehelic Differential Pressure gauge. The Sub-Slab Depressurization System (SSDS) extraction port was also measured for negative pressure to monitor the effectiveness of the active radon fan (RadonAway RPc Series Fan Model RP265c) which draws 334 cubic feet per minute (CFM) of air through the SSDS. The active radon fan continues to operate 24 hours a day, 7 days a week, 365 days a year. CTS also measured Volatile Organic Compound (VOC) gases along the following SSDS ports: extraction port, influent port and effluent port utilizing a photoionization detector (PID). Field measurements are listed below in Table 1.

Table 1 - Interior Vacuum Test Points and VOC Gas Measurements

Interior Vacuum Test Points	May 18, 2018 Magnehelic Differential Pressure (PSI)	October 22, 2019 Magnehelic Differential Pressure (PSI)
TP-1	-0.50	-0.17
TP-2	-0.40	-0.46
TP-3	-0.40	-0.22
TP-4	-0.20	-0.20
Extraction Port	-30.0	-27.7

SSD System Ports	May 18, 2018 PID Readings	October 22, 2019 PID Readings
Extraction Port	3.2 PPM	7.5 PPM
Influent Port	0.0 PPM	7.3 PPM
Effluent Port	0.0 PPM	0.0 PPM
Indoor Ambient Air	1.8 PPM	12.4 PPM

Notes: PSI = pounds per square inch
PPM = parts per million

3.2 Sub-Slab Depressurization System (SSDS) Air Sampling

CTS collected an air sample from the influent port and effluent port associated with the SSDS. Samples were collected in 1 liter Suma canisters with eight-hour regulators and analyzed for VOCs (EPA Method TO-15). The results of this testing is presented in Table 2 below.

Table 2 – Influent Port and Effluent Port Vapor Gas Sample Results

Sample ID	VOC Compounds	12/27/2017 Results ug/m3	12/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Influent Port	Acetone	225	8.3	
	Benzene	1.3	U	
	2-Butanone (MEK)	4.8	10.4	
	Chloroform	U	0.78	
	Cyclohexane	14.5	U	
	Dichlorodifluoromethane	U	2.8	
	Ethanol	18.3	4.0	
	Ethyl acetate	20.6	U	
	Ethylbenzene	82.8	U	N/A
	n-Heptane	22.8	U	
	n-Hexane	10.9	U	
	Styrene	4.1	U	
	Tetrachloroethene (PCE)	181	331	
	Toluene	7.2	1.2	
	Trichloroethene (TCE)	24.4	24.8	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	

	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	7.6	U	
	Vinyl Chloride	U	U	
	m&p-Xylene	389	U	
	o-Xylene	124	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	12/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Effluent Port	Acetone	9.7	51.7	
	Benzene	1.3	0.58	
	Chloroform	U	1.3	
	Cyclohexane	3.3	U	
	Dichlorodifluoromethane	U	3.1	
	Ethanol	23.5	6.3	
	n-Hexane	2.5	U	
	Tetrachloroethene (PCE)	41.5	4.1	
	Toluene	U	6.5	
	Trichloroethene (TCE)	8.4	U	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	N/A
	1,1-Dichloroethane (11-DCA)	U	U	
	Trans-1,2-Dichloroethene	U	9.9	
	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Trichlorofluoromethane	U	1.8	
	Methylene Chloride	U	U	
	Vinyl Chloride	U	U	
	m&p-Xylene	389	3.3	
	o-Xylene	124	U	

3.3 Indoor and Outdoor Ambient Air Sampling

CTS collected one (1) indoor ambient air sample from inside the subject building and one (1) outdoor ambient air sample on the subject Site. The indoor canister was placed on a table in the rear work area of the active dry cleaners and the outdoor canister was placed in the western asphalt paved parking lot area. Samples were collected in 1 liter Suma canisters with eight-hour regulators and analyzed for VOCs (EPA Method TO-15). The results of ambient air testing are presented in Table 3 below.

Table 3 – Indoor and Outdoor Ambient Air Sampling Results

Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Indoor Ambient Air	Acetone	22.3	13.2	N/A
	Benzene	0.56	U	N/A
	Carbon Disulfide	U	2.2	N/A
	Chloromethane	0.70	0.83	N/A
	Dichlorodifluoromethane	U	2.4	N/A
	Ethanol	16.9	19.0	N/A
	Styrene	3.6	U	N/A
	Toluene	1.6	2.0	N/A
	Tetrachloroethene (PCE) [4]	U	**263**	30
	Trichloroethene (TCE) [4]	**61.9**	**46.6**	2
	1,2,4-Trimethylbenzene	U	1.9	N/A
	cis-1,2-Dichloroethene (c12-DCE)	U	U	100
	1,1-Dichloroethene (11-DCE)	U	U	N/A
	1,2-Dichloroethane (12-DCA)	U	U	N/A
	1,1-Dichloroethane (11-DCA)	U	U	N/A
	Carbon Tetrachloride	U	U	N/A
	1,1,1-Trichloroethane (111-TCA)	U	U	100
	1,1,2-Trichloroethane (112-TCA)	U	U	N/A
	Methylene Chloride	U	10.7	60
	Vinyl Chloride	U	U	5

Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Outdoor Ambient Air	Acetone	4.7	8.6	N/A
	Benzene	0.59	0.48	N/A
	Chloromethane	0.64	0.61	N/A
	Dichlorodifluoromethane	1.7	2.4	N/A
	Ethanol	3.0	3.4	N/A
	Toluene	U	1.5	N/A
	Tetrachloroethene (PCE) [4]	U	**69.7**	30
	Trichloroethene (TCE) [4]	U	U	2
	cis-1,2-Dichloroethene (c12-DCE)	U	U	100
	1,1-Dichloroethene (11-DCE)	U	U	N/A
	1,2-Dichloroethane (12-DCA)	U	U	N/A
	1,1-Dichloroethane (11-DCA)	U	U	N/A
	Carbon Tetrachloride	U	U	N/A
	1,1,1-Trichloroethane (111-TCA)	U	U	100
	1,1,2-Trichloroethane (112-TCA)	U	U	N/A
	Methylene Chloride	U	U	60
	Vinyl Chloride	U	U	5

NOTES:
1. All results are expressed in micrograms per cubic meter of air (ug/m³).
2. U= Less than analytical detection limit.
3. **Bold** result values indicate those compounds which exceed the NYSDOH Guideline values published in the "NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)".
4. In September 2013 NYSDOH lowered their air guideline value for tetrachloroethene (PCE) in ambient air from 100 micrograms per cubic meter (mcg/m3) to 30 mcg/m3 and in August 2015 NYSDOH lowered their air guideline value for trichloroethene (TCE) in ambient air from 5 micrograms per cubic meter (mcg/m3) to 2 mcg/m3.
5. N/A – Not Applicable / No NYSDOH Guideline Value

The Indoor Ambient Air sample collected inside the subject building detected an elevated level of PCE at 263 ug/m3 which is above the NYSDOH air guideline value of 30 ug/m3 and TCE at 46.6 ug/m3 which is above the NYSDOH air guideline value of 2 ug/m3. The Outdoor Ambient air sample detected an elevated level of PCE at 69.7 ug/m3 which is above the NYSDOH air guideline value of 30 ug/m3. TCE was reported as being undetected (U) in the Outdoor Ambient Air sample.

3.4 Subsurface Soil Vapor Gas Sampling

CTS collected six (6) soil vapor gas samples from exterior sub-surface permanent soil vapor gas sampling points. Samples were collected in 1 liter Suma canisters with eight-hour regulators and analyzed for VOCs (EPA Method TO-15). The results of subsurface soil vapor gas sampling is presented in Table 4 below.

Table 4 – Subsurface Soil Vapor Gas Sampling Results

Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PPB-1	Acetone	8.2	12.8	
	Benzene	0.78	U	
	Chloroform	10.8	3.7	
	Dichlorodifluoromethane	1.3	3.6	
	Tetrachloroethene (PCE)	290	434	
	Toluene	U	1.2	
	Trichloroethene (TCE)	2.0	5.5	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	
	1,1-Dichloroethene (11-DCE)	U	U	N/A
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	U	U	
	Vinyl Chloride	U	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PP-2	Acetone	4.8	26.4	
	Benzene	U	1.5	

	2-Butanone (MEK)	U	114	
	Dichlorodifluoromethane	1.4	2.2	
	Ethanol	4.0	8.9	
	2-Hexanone	U	7.8	
	Propylene	U	10.7	
	Tetrachloroethene (PCE)	U	172	
	Trichloroethene (TCE)	U	U	N/A
	cis-1,2-Dichloroethene (c12-DCE)	U	U	
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	U	5.3	
	Vinyl Chloride	U	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PP-3	Acetone	41.5	90.0	
	Benzene	U	1.9	
	2-Butanone (MEK)	4.2	14.4	
	Chloroform	U	1.5	
	Ethanol	3.0	5.1	
	n-Hezane	U	4.3	
	Propylene	U	1.4	
	Tetrachloroethene (PCE)	87.9	463	
	Trichloroethene (TCE)	U	9.0	N/A
	cis-1,2-Dichloroethene (c12-DCE)	U	8.1	
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	

	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	U	35.9	
	Vinyl Chloride	U	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PP-4	Acetone	9.5	8.8	
	Benzene	0.52	U	
	Chloroform	U	2.8	
	Dichlorodifluoromethane	U	2.1	
	Ethanol	4.3	4.7	
	Tetrachloroethene (PCE)	87.4	399	
	Toluene	1.3	U	
	Trichloroethene (TCE)	U	2.0	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	N/A
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	U	U	
	Vinyl Chloride	U	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PPB-5	Acetone	U	9.9	
	Benzene	U	0.74	
	2-Butanone (MEK)	U	42.3	
	Chloroform	U	2.3	
	Chloromethane	0.92	U	

	Dichlorodifluoromethane	1.4	2.0	
	Ethanol	U	4.8	
	Tetrachloroethene (PCE)	U	132	
	Trichloroethene (TCE)	U	U	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	N/A
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	
	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	10.3	5.4	
	Vinyl Chloride	U	U	
Sample ID	VOC Compounds	12/27/2017 Results ug/m3	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
PPB-6	Acetone	10.2	15.4	
	Benzene	0.72	1.8	
	2-Butanone (MEK)	30.8	24.1	
	Carbon Disulfide	U	13.6	
	Chloromethane	U	0.70	
	Dichlorodifluoromethane	U	2.4	
	Ethanol	4.4	U	
	n-Heptane	5.5	U	
	n-Hexane	1.2	1.3	
	Propylene	U	6.2	
	Tetrachloroethene (PCE)	U	22.7	
	Toluene	2.4	1.7	N/A
	Trichloroethene (TCE)	U	U	
	cis-1,2-Dichloroethene (c12-DCE)	U	U	
	1,1-Dichloroethene (11-DCE)	U	U	
	1,2-Dichloroethane (12-DCA)	U	U	
	1,1-Dichloroethane (11-DCA)	U	U	

	Carbon Tetrachloride	U	U	
	1,1,1-Trichloroethane (111-TCA)	U	U	
	1,1,2-Trichloroethane (112-TCA)	U	U	
	Methylene Chloride	U	U	
	Vinyl Chloride	U	U	
	Vinyl Acetate	1.0	U	

3.5 Groundwater Monitoring and Sampling

Groundwater samples were obtained utilizing acceptable USEPA low-flow sampling protocols. CTS purged each of the 4-inch wells and containerized the purged water in a 55-gallon drum for eventual disposal. Prior to sampling, water quality monitoring was performed and recorded in Table 5 below. Groundwater samples were analyzed for the presence of VOCs (EPA Method 8260). Laboratory analytical results of the groundwater samples are presenting in Table 6.

Table 5 – Groundwater Monitoring Data

PURGING & WATER QUALITY DATA
FOUR INCH WELLS

Data collected on December 27, 2017

Well #	Sample Time	DTW	DTB	DO (mg/L)	pH	TEMP (C)	ORP	COND (us/cm)	Turbidity
MW-1	1215	9.92	18.20	1.79	6.03	15.61	89.4	371	0.0
MW-2	1155	8.90	17.45	1.67	5.90	15.90	38.7	467	26.4
MW-3	1140	7.42	17.55	1.63	5.99	14.47	-6.8	459	24.1
MW-4	1120	8.95	18.35	1.26	6.06	15.33	-38.1	481	14.8

Data collected on October 22, 2019

Well #	Sample Time	DTW	DTB	DO (mg/L)	pH	TEMP (C)	ORP	COND (us/cm)	Turbidity
MW-1	1436	8.31	18.20	2.18	6.34	20.02	-96	0.258	0.0
MW-2	1340	7.20	17.45	2.34	6.68	20.24	-57	0.392	7.5
MW-3	1215	6.06	17.55	3.15	6.62	19.36	-111	0.292	8.2
MW-4	1301	7.29	18.35	2.90	6.82	19.36	-60	0.383	0.0

Table 6 – Groundwater Sampling Results

Sample ID	VOC Compounds	12/27/2017 Results ug/L	10/22/2019 Results ug/L	NYSDEC Part 703 Standard Values ug/L
MW-1	1,4-Diethylbenzene	U	1.4	5
	Tetrachloroethene (PCE)	4.1	U	5
	1,2,4,5-Tetramethylbenze	U	1.2	5
	Trichloroethene	U	1.3	5
MW-2	-	-	-	-
MW-3	Tetrachloroethene (PCE)	2.0	-	5
MW-4	-	-	-	-

Locations of all sampling points associated with the SSDS are shown on Figure 1 – SSDS Site Sampling Sketch and all of the interior monitoring and exterior sampling points are shown on Figure 2 – Site Sampling Sketch. Laboratory analytical results for vapor gas sampling are included in Appendix A and groundwater sampling results are included in Appendix B. A water table elevation contour map is included in Appendix C.

All samples were analyzed by Pace Analytical Services, LLC. – New York State ELAP Certification # 11647.

3.6 Southern Adjacent Residence Sub-Slab Vapor Gas, and Indoor and Outdoor Ambient Air Sampling

CTS collected one (1) sub-slab vapor gas sample from below the concrete slab of the southern adjacent residence, specifically in the hallway closet. Indoor and outdoor ambient air samples were also collected as part of the off-site investigation. Samples were collected in 1 liter Suma canisters with twenty-four (24) hour regulators and analyzed for VOCs (EPA Method TO-15). The results of off-site gas sampling are presented in Table 7 below.

Table 7 - Southern Adjacent Residence – Sub-slab Vapor Gas, and Indoor and Outdoor Ambient Air Sampling Results

Sample ID	VOC Compounds	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Southern Adjacent Residence Sub-slab	Acetone	163	
	Benzene	0.81	
	2-Butanone (MEK)	6.8	
	Chloroform	2.4	
	Dichlorodifluoromethane	266	
	Ethanol	771	
	Ethyl acetate	14.5	
	n-Heptane	18.0	
	n-Hexane	1.6	
	2-Propanol	357	
	Styrene	1.6	
	Tetrachloroethene (PCE)	10.6	N/A
	Toluene	3.7	
	Trichloroethene (TCE)	U	
	Trichlorofluoromethane	1.9	
	cis-1,2-Dichloroethene (c12-DCE)	3.5	
	1,1-Dichloroethene (11-DCE)	U	
	1,2-Dichloroethane (12-DCA)	5.3	
	1,1-Dichloroethane (11-DCA)	U	
	Carbon Tetrachloride	U	
	1,1,1-Trichloroethane (111-TCA)	U	
	1,1,2-Trichloroethane (112-TCA)	U	
	Methylene Chloride	U	
	Vinyl Chloride	U	
	Vinyl Acetate	U	

Sample ID	VOC Compounds	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Southern Residence Indoor Ambient Air	Acetone	120	N/A
	2-Butanone (MEK)	4.7	N/A
	Chloroform	1.3	N/A
	Dichlorodifluoromethane	6.9	N/A
	Ethanol	698	N/A
	Ethyl acetate	16.3	N/A
	n-Heptane	22.5	N/A
	2-Propylene	419	N/A
	Styrene	2.1	N/A
	Tetrachloroethene (PCE) [4]	7.7	30
	Toluene	3.2	N/A
	Trichloroethene (TCE) [4]	U	2
	Trichlorofluoromethane	1.8	N/A
	1,2,4-Trimethylbenzene	U	N/A
	cis-1,2-Dichloroethene (c12-DCE)	U	100
	1,1-Dichloroethene (11-DCE)	U	N/A
	1,2-Dichloroethane (12-DCA)	6.2	N/A
	1,1-Dichloroethane (11-DCA)	U	N/A
	Carbon Tetrachloride	U	N/A
	1,1,1-Trichloroethane (111-TCA)	U	100
	1,1,2-Trichloroethane (112-TCA)	U	N/A
	Methylene Chloride	8.6	60
	Vinyl Chloride	U	5

NOTES:
1. All results are expressed in micrograms per cubic meter of air (ug/m³).
2. U= Less than analytical detection limit.
3. **Bold** result values indicate those compounds which exceed the NYSDOH Guideline values published in the "NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)".
4. In September 2013 NYSDOH lowered their air guideline value for tetrachloroethene (PCE) in ambient air from 100 micrograms per cubic meter (mcg/m3) to 30 mcg/m3 and in August 2015 NYSDOH lowered their air guideline value for trichloroethene (TCE) in ambient air from 5 micrograms per cubic meter (mcg/m3) to 2 mcg/m3.
5. N/A – Not Applicable / No NYSDOH Guideline Value

Sample ID	VOC Compounds	10/22/2019 Results ug/m3	NYSDOH Air Guideline Values ug/m3
Southern Residence Outdoor Ambient Air	Acetone	10.3	N/A
	Dichlorodifluoromethane	2.4	N/A
	Ethanol	3.6	N/A
	Toluene	1.8	N/A
	Tetrachloroethene (PCE) [4]	U	30
	Trichloroethene (TCE) [4]	U	2
	cis-1,2-Dichloroethene (c12-DCE)	U	100
	1,1-Dichloroethene (11-DCE)	U	N/A
	1,2-Dichloroethane (12-DCA)	U	N/A
	1,1-Dichloroethane (11-DCA)	U	N/A
	Carbon Tetrachloride	U	N/A
	1,1,1-Trichloroethane (111-TCA)	U	100
	1,1,2-Trichloroethane (112-TCA)	U	N/A
	Methylene Chloride	16.5	60
	Vinyl Chloride	U	5

NOTES:
1. All results are expressed in micrograms per cubic meter of air (ug/m^3).
2. U= Less than analytical detection limit.
3. **Bold** result values indicate those compounds which exceed the NYSDOH Guideline values published in the "NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006)".
4. In September 2013 NYSDOH lowered their air guideline value for tetrachloroethene (PCE) in ambient air from 100 micrograms per cubic meter (mcg/m3) to 30 mcg/m3 and in August 2015 NYSDOH lowered their air guideline value for trichloroethene (TCE) in ambient air from 5 micrograms per cubic meter (mcg/m3) to 2 mcg/m3.
5. N/A – Not Applicable / No NYSDOH Guideline Value

The soil vapor samples were collected according to the methods recommended in the New York State Department of Health (NYSDOH) Final Guidance Document for Evaluating Soil Vapor Intrusion in the State of New York (dated October 2006; the NYSDOH Final Guidance Document), and laboratory analytical results (via EPA Method TO-15 for VOCs) were compared to three newly (May 2017) revised/renamed NYSDOH Soil Vapor / Indoor Air Decision Matrices which supersede those provided in the final guidance and in subsequent updates to the guidance document.

Southern Adjacent Residence Sub-slab: The dry cleaning chemical Tetrachloroethene (PCE/Perc) was identified at 10.6 micrograms per cubic meter of air [ug/m³]. The dry cleaning chemical Trichloroethene (TCE) was undetected (U). Cis-1,2-Dichloroethene (c12-DCE) was detected at 3.5 ug/m³. Methylene Chloride was undetected (U). Additional VOC's were also detected at low levels but are not considered to be indicative of dry cleaning chemical compounds. These levels are summarized in Table 7 above.

Although trace levels of PCE and other VOC's were identified in Southern Adjacent Residence Sub-slab, NYSDOH currently does not have air guidance values for sub-slab soil vapors; however, the relationship between these sub-slab values and the ambient air values must be applied to NYSDOH newly revised and renamed Soil Vapor / Indoor Air Decision Matrices (May 2017) to determine human health exposure to eight volatile chemicals. These comparison decision matrices are described below.

PCE was detected at 7.7 ug/m³ in the Southern Residence Indoor Ambient Air sample but below the NYSDOH guidance value of 30 ug/m³. TCE was not detected in the Indoor Ambient Air sample. PCE and TCE were not detected in the Southern Residence Outdoor Ambient Air sample; however, Methylene Chloride was detected at 8.6 ug/m³ in the indoor ambient air and 16.5 ug/m³ in the outdoor ambient air but below the NYSDOH guidance value of 60 ug/m³.

Conclusion: According to **Decision Matrix A** (used for TCE), based on indoor air with a TCE concentration of < 0.2 ug/m³ {reported in the Indoor and Outdoor Ambient Air samples as No Level Detected (ND)} and with a TCE sub-slab concentration of < 6 ug/m³ (reported as U in Southern Adjacent Residence Sub-Slab), the decision calls for **"No Further Action".**

NYSDOH Soil Vapor/Indoor Air Matrix A decision of **"No Further Action"** states that no additional actions are recommended to address human exposures.

According to **Decision Matrix B** (used for PCE), based on indoor air with a PCE concentration of 3 ug/m³ to 10 ug/m³ {reported in the Indoor Ambient Air samples as 7.7 ug/m³} and with a

PCE sub-slab concentration of < 100 ug/m³ (reported as 10.6 in Southern Adjacent Residence Sub-Slab), the decision calls for **"No Further Action".**

According to **Decision Matrix B** (used for Methylene Chloride {MC}), based on indoor air with a MC concentration of 3 ug/m³ to <10 ug/m³ (reported in the Indoor Ambient Air sample as 8.6 ug/m³ and in the Outdoor Ambient Air sample as 16.5) and with a MC sub-slab concentration of < 100 ug/m³ (reported as U in Southern Adjacent Residence Sub-Slab), the decision calls for **"No Further Action".**

NYSDOH Soil Vapor/Indoor Air Matrix B decision of **"No Further Action"** states that no additional actions are recommended to address human exposures.

Off-site sampling points are shown on Figure 1 – Site Sampling Sketch and the first floor plan vies sketch. Laboratory analytical results for the southern adjacent residential property are included in Appendix C. All samples were analyzed by Pace Analytical Services, LLC. – New York State ELAP Certification # 11647.

4.0 INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY, AND SUB-SLAB DEPRESSURIZATION SITE MANAGEMENT FORM

CTS on behalf of Mr. Thomas Ryan (owner) completed the NYSDOH "Indoor Air Quality Questionnaire and Building Inventory Form" for the subject Site during sampling activities. This form includes a product inventory form which list each of the products/chemicals used and stored at the active dry cleaners. The completed form is included in Appendix D. As part of the annual sampling, CTS inspected the SSDS and all of its components to ensure they are operating properly. The completed Sub-slab Depressurization Site Management Form is included in Appendix F.

CTS also completed the NYSDOH "Indoor Air Quality Questionnaire and Building Inventory Form" for the southern adjacent residential property during sampling activities. Although the form is complete, CTS was only granted limited access to the private residential dwelling at the time of sampling. The completed form is included in Appendix E.

Photographs of on-site and off-site sampling activities are shown in Appendix G.

Material Safety Data Sheets (MSDS) for on-site chemicals are shown in Appendix H.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the monitoring and sampling data presented above, it appears PCE and TCE is still present in the ambient air inside the subject building and that PCE is being vented out of the building through exhaust fans as levels were detected in the ambient air. The indoor ambient air sampled collected inside the subject building detected an elevated level of PCE at 263 ug/m^3 which is above the NYSDOH air guideline value of 30 ug/m^3 and an elevated level of TCE at 46.6 which is above the NYSDOH air guideline value of 2 ug/m^3.

PCE is still present in the subsurface soils on the west side of the building (area of former spill remediation), north, south, and east side of the subject building and below the building slab. TCE is also present in the subsurface soils on the west side of the building (area of former spill remediation) and along the south side of the subject building and below the building slab. Trace levels of TCE was detected along the north side of the building.

Groundwater samples collected from the on-site monitoring wells did not exceed NYSDEC Glass GA groundwater standards.

Based on this first PRR monitoring and sampling event of the remedial system, CTS recommends that the SSD system and all of its engineering controls continue to be sampled/monitored on an annual bases, for comparison purposes, as specified in the Department approved Final Site Management Plan.

Based on the results of off-site sampling and applying the data to the NYSDOH newly revised Matrix Tables, “No Further Action” or additional sampling/monitoring is required at the southern adjacent residential property located at 3 Seventeenth Street, Bayville, New York.

FIGURES

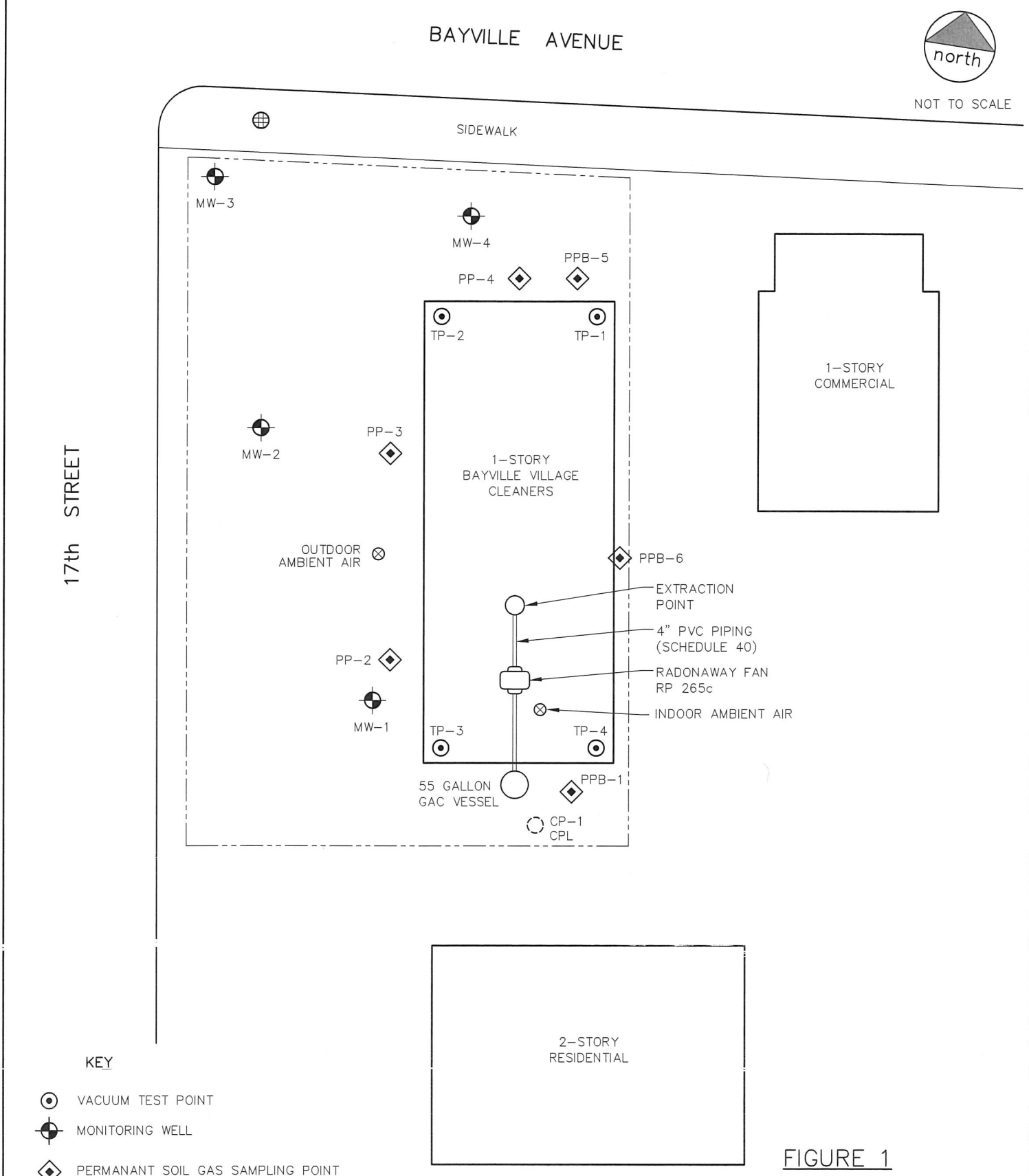


FIGURE 1

SITE SAMPLING SKETCH

Bayville Village Cleaners

290 Bayville Avenue

Bayville, New York

Cashin Associates, P.C.

ENGINEERING PLANNING CONSTRUCTION MANAGEMENT

13CTS.022 TASK 5

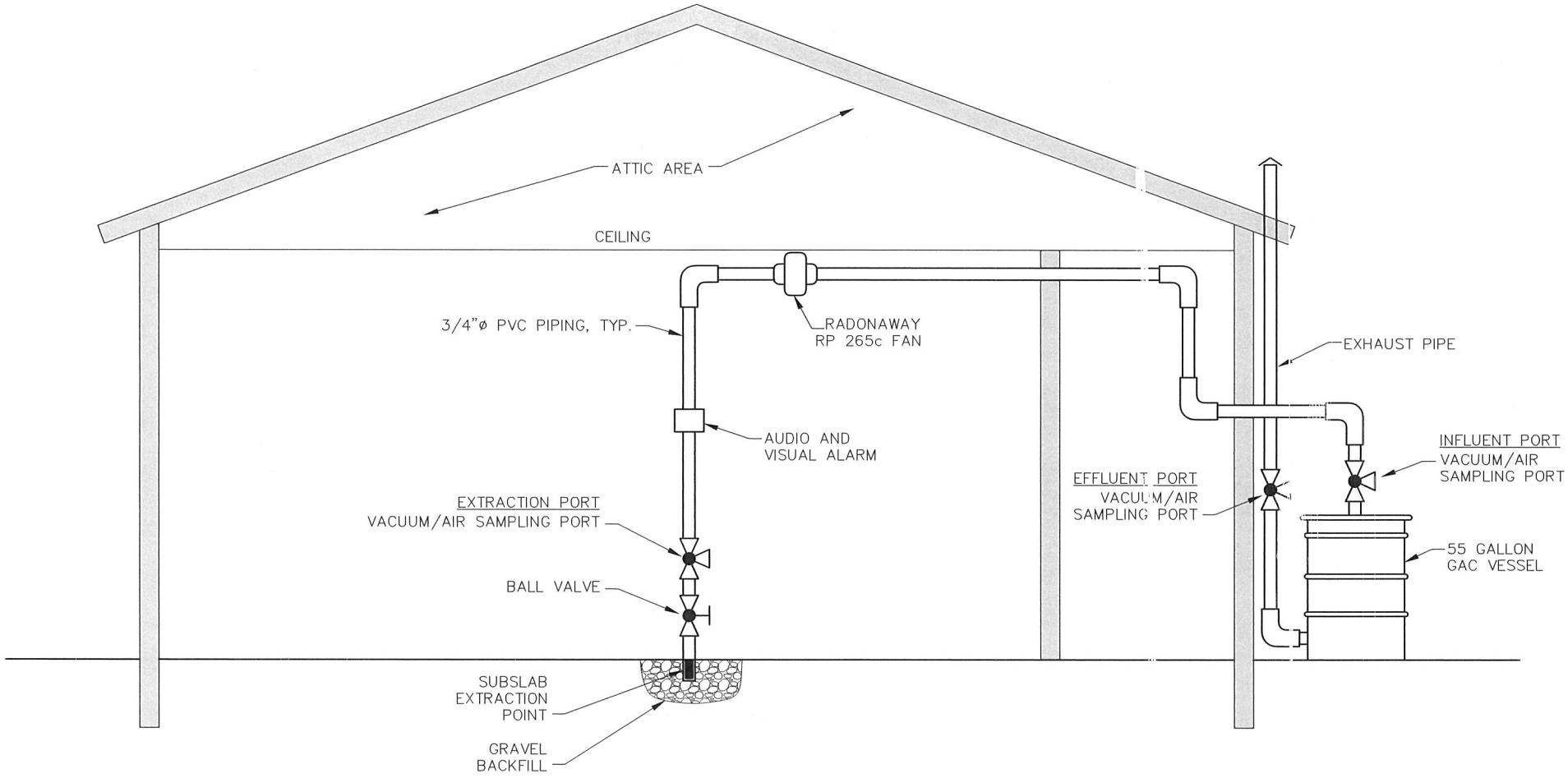


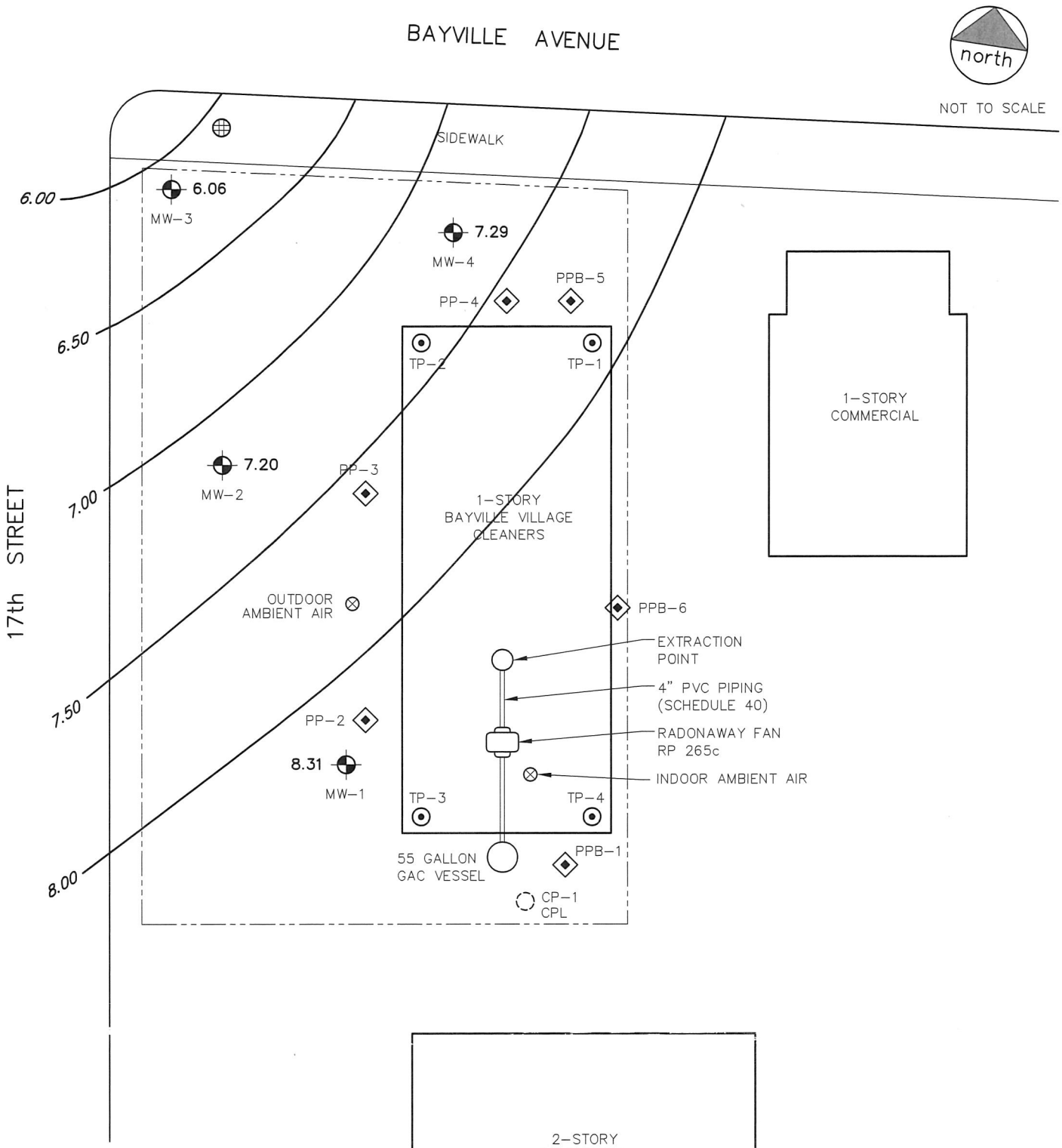
FIGURE 2

SSDS SITE SAMPLING SKETCH

Bayville Village Cleaners
290 Bayville Avenue
Bayville, New York

Cashin Associates, P.C.
ENGINEERING PLANNING CONSTRUCTION MANAGEMENT

13CTS.022 TASK 5



KEY

- VACUUM TEST POINT
- MONITORING WELL
- PERMANANT SOIL GAS SAMPLING POINT
- STORM DRAIN
- CESSPOOL
- AMBIENT AIR SAMPLING POINT

Cashin Associates, P.C.
ENGINEERING·PLANNING·CONSTRUCTION MANAGEMENT

13CTS.022 TASK 5

FIGURE 3

WATER TABLE ELEVATION
CONTOUR MAP

Bayville Village Cleaners
290 Bayville Avenue
Bayville, New York

APPENDIX A

Vapor Gas Sampling Results

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

November 06, 2019

Marc Califano
Cashin Associates
1200 Veterans Memorial Highway
Hauppauge, NY 11788

RE: Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Dear Marc Califano:
Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Thomas Ryan, Bayville Cleaners

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

SAMPLE ANALYTE COUNT

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70109447001	**PPB-1**	TO-15	MJL	61	PASI-M
70109447002	**PP-2**	TO-15	MJL	61	PASI-M
70109447003	**PP-3**	TO-15	MJL	61	PASI-M
70109447004	**PP-4**	TO-15	MJL	61	PASI-M
70109447005	**PPB-5**	TO-15	MJL	61	PASI-M
70109447006	**PPB-6**	TO-15	MJL	61	PASI-M
70109447007	**INFLUENT PORT**	TO-15	MJL	61	PASI-M
70109447008	**EFFLUENT PORT**	TO-15	MJL	61	PASI-M
70109447009	**INDOOR AMBIENT AIR**	TO-15	MJL	61	PASI-M
70109447010	**OUTDOOR AMBIENT AIR**	TO-15	MJL	61	PASI-M

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-1 **Lab ID: 70109447001** Collected: 10/22/19 16:35 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**12.8**	ug/m3	3.5	1.44		11/03/19 19:08	67-64-1	
Benzene	**<0.47**	ug/m3	0.47	1.44		11/03/19 19:08	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.44		11/03/19 19:08	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 19:08	75-27-4	
Bromoform	**<7.6**	ug/m3	7.6	1.44		11/03/19 19:08	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	74-83-9	
1,3-Butadiene	**<0.65**	ug/m3	0.65	1.44		11/03/19 19:08	106-99-0	
2-Butanone (MEK)	**<4.3**	ug/m3	4.3	1.44		11/03/19 19:08	78-93-3	
Carbon disulfide	**<0.91**	ug/m3	0.91	1.44		11/03/19 19:08	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	108-90-7	
Chloroethane	**<0.77**	ug/m3	0.77	1.44		11/03/19 19:08	75-00-3	
Chloroform	**3.7**	ug/m3	0.71	1.44		11/03/19 19:08	67-66-3	
Chloromethane	**<0.60**	ug/m3	0.60	1.44		11/03/19 19:08	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	541-73-1	
1,4-Dichlorobenzene	**<4.4**	ug/m3	4.4	1.44		11/03/19 19:08	106-46-7	
Dichlorodifluoromethane	**3.6**	ug/m3	1.5	1.44		11/03/19 19:08	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	75-34-3	
1,2-Dichloroethane	**<0.59**	ug/m3	0.59	1.44		11/03/19 19:08	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 19:08	76-14-2	
Ethanol	**<2.8**	ug/m3	2.8	1.44		11/03/19 19:08	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.44		11/03/19 19:08	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	142-82-5	
Hexachloro-1,3-butadiene	**<7.8**	ug/m3	7.8	1.44		11/03/19 19:08	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	110-54-3	
2-Hexanone	**<6.0**	ug/m3	6.0	1.44		11/03/19 19:08	591-78-6	
Methylene Chloride	**<5.1**	ug/m3	5.1	1.44		11/03/19 19:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/m3	6.0	1.44		11/03/19 19:08	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.44		11/03/19 19:08	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.44		11/03/19 19:08	91-20-3	
2-Propanol	**<3.6**	ug/m3	3.6	1.44		11/03/19 19:08	67-63-0	
Propylene	**<0.50**	ug/m3	0.50	1.44		11/03/19 19:08	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	79-34-5	
Tetrachloroethene	**434**	ug/m3	9.9	14.4		11/04/19 18:34	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-1 **Lab ID: 70109447001** Collected: 10/22/19 16:35 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.86**	ug/m3	0.86	1.44		11/03/19 19:08	109-99-9	
Toluene	**1.2**	ug/m3	1.1	1.44		11/03/19 19:08	108-88-3	
1,2,4-Trichlorobenzene	**<10.9**	ug/m3	10.9	1.44		11/03/19 19:08	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 19:08	71-55-6	
1,1,2-Trichloroethane	**<0.80**	ug/m3	0.80	1.44		11/03/19 19:08	79-00-5	
Trichloroethene	**5.5**	ug/m3	0.79	1.44		11/03/19 19:08	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 19:08	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.44		11/03/19 19:08	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.44		11/03/19 19:08	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-2 **Lab ID: 70109447002** Collected: 10/22/19 17:00 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**26.4**	ug/m3	3.4	1.41		11/03/19 19:37	67-64-1	
Benzene	**1.5**	ug/m3	0.46	1.41		11/03/19 19:37	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.41		11/03/19 19:37	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.41		11/03/19 19:37	75-27-4	
Bromoform	**<7.4**	ug/m3	7.4	1.41		11/03/19 19:37	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.41		11/03/19 19:37	106-99-0	
2-Butanone (MEK)	**114**	ug/m3	4.2	1.41		11/03/19 19:37	78-93-3	
Carbon disulfide	**<0.89**	ug/m3	0.89	1.41		11/03/19 19:37	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.41		11/03/19 19:37	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	108-90-7	
Chloroethane	**<0.76**	ug/m3	0.76	1.41		11/03/19 19:37	75-00-3	
Chloroform	**<0.70**	ug/m3	0.70	1.41		11/03/19 19:37	67-66-3	
Chloromethane	**<0.59**	ug/m3	0.59	1.41		11/03/19 19:37	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.41		11/03/19 19:37	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.41		11/03/19 19:37	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.41		11/03/19 19:37	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.41		11/03/19 19:37	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.41		11/03/19 19:37	106-46-7	
Dichlorodifluoromethane	**2.2**	ug/m3	1.4	1.41		11/03/19 19:37	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	75-34-3	
1,2-Dichloroethane	**<0.58**	ug/m3	0.58	1.41		11/03/19 19:37	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.41		11/03/19 19:37	76-14-2	
Ethanol	**8.9**	ug/m3	2.7	1.41		11/03/19 19:37	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.41		11/03/19 19:37	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	142-82-5	
Hexachloro-1,3-butadiene	**<7.6**	ug/m3	7.6	1.41		11/03/19 19:37	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	110-54-3	
2-Hexanone	**7.8**	ug/m3	5.9	1.41		11/03/19 19:37	591-78-6	
Methylene Chloride	**5.3**	ug/m3	5.0	1.41		11/03/19 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.9**	ug/m3	5.9	1.41		11/03/19 19:37	108-10-1	
Methyl-tert-butyl ether	**<5.2**	ug/m3	5.2	1.41		11/03/19 19:37	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.41		11/03/19 19:37	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.41		11/03/19 19:37	67-63-0	
Propylene	**10.7**	ug/m3	0.49	1.41		11/03/19 19:37	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.98**	ug/m3	0.98	1.41		11/03/19 19:37	79-34-5	
Tetrachloroethene	**172**	ug/m3	0.97	1.41		11/03/19 19:37	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-2 **Lab ID: 70109447002** Collected: 10/22/19 17:00 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.85**	ug/m3	0.85	1.41		11/03/19 19:37	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	108-88-3	
1,2,4-Trichlorobenzene	**<10.6**	ug/m3	10.6	1.41		11/03/19 19:37	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.41		11/03/19 19:37	71-55-6	
1,1,2-Trichloroethane	**<0.78**	ug/m3	0.78	1.41		11/03/19 19:37	79-00-5	
Trichloroethene	**<0.77**	ug/m3	0.77	1.41		11/03/19 19:37	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.41		11/03/19 19:37	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.41		11/03/19 19:37	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.41		11/03/19 19:37	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.41		11/03/19 19:37	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.41		11/03/19 19:37	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.41		11/03/19 19:37	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-3 **Lab ID: 70109447003** Collected: 10/22/19 17:40 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**90.0**	ug/m3	6.1	2.52		11/03/19 20:06	67-64-1	
Benzene	**1.9**	ug/m3	0.82	2.52		11/03/19 20:06	71-43-2	
Benzyl chloride	**<6.6**	ug/m3	6.6	2.52		11/03/19 20:06	100-44-7	
Bromodichloromethane	**<3.4**	ug/m3	3.4	2.52		11/03/19 20:06	75-27-4	
Bromoform	**<13.2**	ug/m3	13.2	2.52		11/03/19 20:06	75-25-2	
Bromomethane	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	74-83-9	
1,3-Butadiene	**<1.1**	ug/m3	1.1	2.52		11/03/19 20:06	106-99-0	
2-Butanone (MEK)	**14.4**	ug/m3	7.6	2.52		11/03/19 20:06	78-93-3	
Carbon disulfide	**<1.6**	ug/m3	1.6	2.52		11/03/19 20:06	75-15-0	
Carbon tetrachloride	**<3.2**	ug/m3	3.2	2.52		11/03/19 20:06	56-23-5	
Chlorobenzene	**<2.4**	ug/m3	2.4	2.52		11/03/19 20:06	108-90-7	
Chloroethane	**<1.4**	ug/m3	1.4	2.52		11/03/19 20:06	75-00-3	
Chloroform	**1.5**	ug/m3	1.2	2.52		11/03/19 20:06	67-66-3	
Chloromethane	**<1.1**	ug/m3	1.1	2.52		11/03/19 20:06	74-87-3	
Cyclohexane	**<4.4**	ug/m3	4.4	2.52		11/03/19 20:06	110-82-7	
Dibromochloromethane	**<4.4**	ug/m3	4.4	2.52		11/03/19 20:06	124-48-1	
1,2-Dibromoethane (EDB)	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	106-93-4	
1,2-Dichlorobenzene	**<3.1**	ug/m3	3.1	2.52		11/03/19 20:06	95-50-1	
1,3-Dichlorobenzene	**<3.1**	ug/m3	3.1	2.52		11/03/19 20:06	541-73-1	
1,4-Dichlorobenzene	**<7.7**	ug/m3	7.7	2.52		11/03/19 20:06	106-46-7	
Dichlorodifluoromethane	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	75-71-8	
1,1-Dichloroethane	**<2.1**	ug/m3	2.1	2.52		11/03/19 20:06	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/m3	1.0	2.52		11/03/19 20:06	107-06-2	
1,1-Dichloroethene	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	75-35-4	
cis-1,2-Dichloroethene	**8.1**	ug/m3	2.0	2.52		11/03/19 20:06	156-59-2	
trans-1,2-Dichloroethene	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	156-60-5	
1,2-Dichloropropane	**<2.4**	ug/m3	2.4	2.52		11/03/19 20:06	78-87-5	
cis-1,3-Dichloropropene	**<2.3**	ug/m3	2.3	2.52		11/03/19 20:06	10061-01-5	
trans-1,3-Dichloropropene	**<2.3**	ug/m3	2.3	2.52		11/03/19 20:06	10061-02-6	
Dichlorotetrafluoroethane	**<3.6**	ug/m3	3.6	2.52		11/03/19 20:06	76-14-2	
Ethanol	**5.1**	ug/m3	4.8	2.52		11/03/19 20:06	64-17-5	
Ethyl acetate	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	141-78-6	
Ethylbenzene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	100-41-4	
4-Ethyltoluene	**<6.3**	ug/m3	6.3	2.52		11/03/19 20:06	622-96-8	
n-Heptane	**<2.1**	ug/m3	2.1	2.52		11/03/19 20:06	142-82-5	
Hexachloro-1,3-butadiene	**<13.7**	ug/m3	13.7	2.52		11/03/19 20:06	87-68-3	
n-Hexane	**4.3**	ug/m3	1.8	2.52		11/03/19 20:06	110-54-3	
2-Hexanone	**<10.5**	ug/m3	10.5	2.52		11/03/19 20:06	591-78-6	
Methylene Chloride	**35.9**	ug/m3	8.9	2.52		11/03/19 20:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<10.5**	ug/m3	10.5	2.52		11/03/19 20:06	108-10-1	
Methyl-tert-butyl ether	**<9.2**	ug/m3	9.2	2.52		11/03/19 20:06	1634-04-4	
Naphthalene	**<6.7**	ug/m3	6.7	2.52		11/03/19 20:06	91-20-3	
2-Propanol	**<6.3**	ug/m3	6.3	2.52		11/03/19 20:06	67-63-0	
Propylene	**1.4**	ug/m3	0.88	2.52		11/03/19 20:06	115-07-1	
Styrene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	79-34-5	
Tetrachloroethene	**463**	ug/m3	8.7	12.6		11/04/19 18:04	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-3 **Lab ID: 70109447003** Collected: 10/22/19 17:40 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<1.5**	ug/m3	1.5	2.52		11/03/19 20:06	109-99-9	
Toluene	**<1.9**	ug/m3	1.9	2.52		11/03/19 20:06	108-88-3	
1,2,4-Trichlorobenzene	**<19.0**	ug/m3	19.0	2.52		11/03/19 20:06	120-82-1	
1,1,1-Trichloroethane	**<2.8**	ug/m3	2.8	2.52		11/03/19 20:06	71-55-6	
1,1,2-Trichloroethane	**<1.4**	ug/m3	1.4	2.52		11/03/19 20:06	79-00-5	
Trichloroethene	**9.0**	ug/m3	1.4	2.52		11/03/19 20:06	79-01-6	
Trichlorofluoromethane	**<2.9**	ug/m3	2.9	2.52		11/03/19 20:06	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<3.9**	ug/m3	3.9	2.52		11/03/19 20:06	76-13-1	
1,2,4-Trimethylbenzene	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	95-63-6	
1,3,5-Trimethylbenzene	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	108-67-8	
Vinyl acetate	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	108-05-4	
Vinyl chloride	**<0.66**	ug/m3	0.66	2.52		11/03/19 20:06	75-01-4	
m&p-Xylene	**<4.5**	ug/m3	4.5	2.52		11/03/19 20:06	179601-23-1	
o-Xylene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-4 **Lab ID: 70109447004** Collected: 10/22/19 16:25 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.8**	ug/m3	3.3	1.39		11/03/19 20:35	67-64-1	
Benzene	**<0.45**	ug/m3	0.45	1.39		11/03/19 20:35	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.39		11/03/19 20:35	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.39		11/03/19 20:35	75-27-4	
Bromoform	**<7.3**	ug/m3	7.3	1.39		11/03/19 20:35	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.39		11/03/19 20:35	106-99-0	
2-Butanone (MEK)	**<4.2**	ug/m3	4.2	1.39		11/03/19 20:35	78-93-3	
Carbon disulfide	**<0.88**	ug/m3	0.88	1.39		11/03/19 20:35	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.39		11/03/19 20:35	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	108-90-7	
Chloroethane	**<0.75**	ug/m3	0.75	1.39		11/03/19 20:35	75-00-3	
Chloroform	**2.8**	ug/m3	0.69	1.39		11/03/19 20:35	67-66-3	
Chloromethane	**<0.58**	ug/m3	0.58	1.39		11/03/19 20:35	74-87-3	
Cyclohexane	**<2.4**	ug/m3	2.4	1.39		11/03/19 20:35	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.39		11/03/19 20:35	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 20:35	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 20:35	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.39		11/03/19 20:35	106-46-7	
Dichlorodifluoromethane	**2.1**	ug/m3	1.4	1.39		11/03/19 20:35	75-71-8	
1,1-Dichloroethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	75-34-3	
1,2-Dichloroethane	**<0.57**	ug/m3	0.57	1.39		11/03/19 20:35	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.39		11/03/19 20:35	76-14-2	
Ethanol	**4.7**	ug/m3	2.7	1.39		11/03/19 20:35	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.39		11/03/19 20:35	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	142-82-5	
Hexachloro-1,3-butadiene	**<7.5**	ug/m3	7.5	1.39		11/03/19 20:35	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	110-54-3	
2-Hexanone	**<5.8**	ug/m3	5.8	1.39		11/03/19 20:35	591-78-6	
Methylene Chloride	**<4.9**	ug/m3	4.9	1.39		11/03/19 20:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.8**	ug/m3	5.8	1.39		11/03/19 20:35	108-10-1	
Methyl-tert-butyl ether	**<5.1**	ug/m3	5.1	1.39		11/03/19 20:35	1634-04-4	
Naphthalene	**<3.7**	ug/m3	3.7	1.39		11/03/19 20:35	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.39		11/03/19 20:35	67-63-0	
Propylene	**<0.49**	ug/m3	0.49	1.39		11/03/19 20:35	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.97**	ug/m3	0.97	1.39		11/03/19 20:35	79-34-5	
Tetrachloroethene	**399**	ug/m3	19.2	27.8		11/04/19 19:02	127-18-4	

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(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PP-4 **Lab ID: 70109447004** Collected: 10/22/19 16:25 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.83**	ug/m3	0.83	1.39		11/03/19 20:35	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	108-88-3	
1,2,4-Trichlorobenzene	**<10.5**	ug/m3	10.5	1.39		11/03/19 20:35	120-82-1	
1,1,1-Trichloroethane	**<1.5**	ug/m3	1.5	1.39		11/03/19 20:35	71-55-6	
1,1,2-Trichloroethane	**<0.77**	ug/m3	0.77	1.39		11/03/19 20:35	79-00-5	
Trichloroethene	**2.0**	ug/m3	0.76	1.39		11/03/19 20:35	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.39		11/03/19 20:35	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.39		11/03/19 20:35	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 20:35	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 20:35	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	108-05-4	
Vinyl chloride	**<0.36**	ug/m3	0.36	1.39		11/03/19 20:35	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.39		11/03/19 20:35	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-5 **Lab ID: 70109447005** Collected: 10/22/19 15:47 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**9.9**	ug/m3	3.6	1.49		11/03/19 21:04	67-64-1	
Benzene	**0.74**	ug/m3	0.48	1.49		11/03/19 21:04	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 21:04	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 21:04	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 21:04	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 21:04	106-99-0	
2-Butanone (MEK)	**42.3**	ug/m3	4.5	1.49		11/03/19 21:04	78-93-3	
Carbon disulfide	**<0.94**	ug/m3	0.94	1.49		11/03/19 21:04	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 21:04	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 21:04	75-00-3	
Chloroform	**2.3**	ug/m3	0.74	1.49		11/03/19 21:04	67-66-3	
Chloromethane	**<0.63**	ug/m3	0.63	1.49		11/03/19 21:04	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:04	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:04	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 21:04	106-46-7	
Dichlorodifluoromethane	**2.0**	ug/m3	1.5	1.49		11/03/19 21:04	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 21:04	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 21:04	76-14-2	
Ethanol	**4.8**	ug/m3	2.9	1.49		11/03/19 21:04	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:04	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 21:04	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:04	591-78-6	
Methylene Chloride	**5.4**	ug/m3	5.3	1.49		11/03/19 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:04	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 21:04	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 21:04	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:04	67-63-0	
Propylene	**<0.52**	ug/m3	0.52	1.49		11/03/19 21:04	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 21:04	79-34-5	
Tetrachloroethene	**132**	ug/m3	1.0	1.49		11/03/19 21:04	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-5 **Lab ID: 70109447005** Collected: 10/22/19 15:47 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 21:04	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 21:04	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:04	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 21:04	79-00-5	
Trichloroethene	**<0.81**	ug/m3	0.81	1.49		11/03/19 21:04	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:04	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 21:04	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:04	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:04	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 21:04	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-6 **Lab ID: 70109447006** Collected: 10/22/19 16:00 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**15.4**	ug/m3	3.6	1.49		11/03/19 21:33	67-64-1	
Benzene	**1.8**	ug/m3	0.48	1.49		11/03/19 21:33	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 21:33	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 21:33	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 21:33	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 21:33	106-99-0	
2-Butanone (MEK)	**24.1**	ug/m3	4.5	1.49		11/03/19 21:33	78-93-3	
Carbon disulfide	**13.6**	ug/m3	0.94	1.49		11/03/19 21:33	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 21:33	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 21:33	75-00-3	
Chloroform	**<0.74**	ug/m3	0.74	1.49		11/03/19 21:33	67-66-3	
Chloromethane	**0.70**	ug/m3	0.63	1.49		11/03/19 21:33	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:33	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:33	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 21:33	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.49		11/03/19 21:33	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 21:33	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 21:33	76-14-2	
Ethanol	**<2.9**	ug/m3	2.9	1.49		11/03/19 21:33	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:33	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:33	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 21:33	87-68-3	
n-Hexane	**1.3**	ug/m3	1.1	1.49		11/03/19 21:33	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:33	591-78-6	
Methylene Chloride	**<5.3**	ug/m3	5.3	1.49		11/03/19 21:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:33	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 21:33	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 21:33	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:33	67-63-0	
Propylene	**6.2**	ug/m3	0.52	1.49		11/03/19 21:33	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 21:33	79-34-5	
Tetrachloroethene	**22.7**	ug/m3	1.0	1.49		11/03/19 21:33	127-18-4	

REPORT OF LABORATORY ANALYSIS

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(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: PPB-6 **Lab ID: 70109447006** Collected: 10/22/19 16:00 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 21:33	109-99-9	
Toluene	**1.7**	ug/m3	1.1	1.49		11/03/19 21:33	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 21:33	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:33	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 21:33	79-00-5	
Trichloroethene	**<0.81**	ug/m3	0.81	1.49		11/03/19 21:33	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:33	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 21:33	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:33	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:33	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:33	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 21:33	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: INFLUENT PORT **Lab ID: 70109447007** Collected: 10/22/19 17:25 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.3**	ug/m3	3.3	1.39		11/03/19 22:02	67-64-1	
Benzene	**<0.45**	ug/m3	0.45	1.39		11/03/19 22:02	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.39		11/03/19 22:02	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.39		11/03/19 22:02	75-27-4	
Bromoform	**<7.3**	ug/m3	7.3	1.39		11/03/19 22:02	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.39		11/03/19 22:02	106-99-0	
2-Butanone (MEK)	**10.4**	ug/m3	4.2	1.39		11/03/19 22:02	78-93-3	
Carbon disulfide	**<0.88**	ug/m3	0.88	1.39		11/03/19 22:02	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.39		11/03/19 22:02	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	108-90-7	
Chloroethane	**<0.75**	ug/m3	0.75	1.39		11/03/19 22:02	75-00-3	
Chloroform	**0.78**	ug/m3	0.69	1.39		11/03/19 22:02	67-66-3	
Chloromethane	**<0.58**	ug/m3	0.58	1.39		11/03/19 22:02	74-87-3	
Cyclohexane	**<2.4**	ug/m3	2.4	1.39		11/03/19 22:02	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.39		11/03/19 22:02	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 22:02	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 22:02	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.39		11/03/19 22:02	106-46-7	
Dichlorodifluoromethane	**2.8**	ug/m3	1.4	1.39		11/03/19 22:02	75-71-8	
1,1-Dichloroethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	75-34-3	
1,2-Dichloroethane	**<0.57**	ug/m3	0.57	1.39		11/03/19 22:02	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.39		11/03/19 22:02	76-14-2	
Ethanol	**4.0**	ug/m3	2.7	1.39		11/03/19 22:02	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.39		11/03/19 22:02	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	142-82-5	
Hexachloro-1,3-butadiene	**<7.5**	ug/m3	7.5	1.39		11/03/19 22:02	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	110-54-3	
2-Hexanone	**<5.8**	ug/m3	5.8	1.39		11/03/19 22:02	591-78-6	
Methylene Chloride	**<4.9**	ug/m3	4.9	1.39		11/03/19 22:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.8**	ug/m3	5.8	1.39		11/03/19 22:02	108-10-1	
Methyl-tert-butyl ether	**<5.1**	ug/m3	5.1	1.39		11/03/19 22:02	1634-04-4	
Naphthalene	**<3.7**	ug/m3	3.7	1.39		11/03/19 22:02	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.39		11/03/19 22:02	67-63-0	
Propylene	**<0.49**	ug/m3	0.49	1.39		11/03/19 22:02	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.97**	ug/m3	0.97	1.39		11/03/19 22:02	79-34-5	
Tetrachloroethene	**331**	ug/m3	19.2	27.8		11/04/19 19:30	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: INFLUENT PORT **Lab ID: 70109447007** Collected: 10/22/19 17:25 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.83**	ug/m3	0.83	1.39		11/03/19 22:02	109-99-9	
Toluene	**1.2**	ug/m3	1.1	1.39		11/03/19 22:02	108-88-3	
1,2,4-Trichlorobenzene	**<10.5**	ug/m3	10.5	1.39		11/03/19 22:02	120-82-1	
1,1,1-Trichloroethane	**<1.5**	ug/m3	1.5	1.39		11/03/19 22:02	71-55-6	
1,1,2-Trichloroethane	**<0.77**	ug/m3	0.77	1.39		11/03/19 22:02	79-00-5	
Trichloroethene	**24.8**	ug/m3	0.76	1.39		11/03/19 22:02	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.39		11/03/19 22:02	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.39		11/03/19 22:02	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 22:02	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 22:02	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	108-05-4	
Vinyl chloride	**<0.36**	ug/m3	0.36	1.39		11/03/19 22:02	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.39		11/03/19 22:02	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: EFFLUENT PORT **Lab ID: 70109447008** Collected: 10/22/19 17:05 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**51.7**	ug/m3	3.7	1.55		11/03/19 22:31	67-64-1	
Benzene	**0.58**	ug/m3	0.50	1.55		11/03/19 22:31	71-43-2	
Benzyl chloride	**<4.1**	ug/m3	4.1	1.55		11/03/19 22:31	100-44-7	
Bromodichloromethane	**<2.1**	ug/m3	2.1	1.55		11/03/19 22:31	75-27-4	
Bromoform	**<8.1**	ug/m3	8.1	1.55		11/03/19 22:31	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	74-83-9	
1,3-Butadiene	**<0.70**	ug/m3	0.70	1.55		11/03/19 22:31	106-99-0	
2-Butanone (MEK)	**<4.6**	ug/m3	4.6	1.55		11/03/19 22:31	78-93-3	
Carbon disulfide	**<0.98**	ug/m3	0.98	1.55		11/03/19 22:31	75-15-0	
Carbon tetrachloride	**<2.0**	ug/m3	2.0	1.55		11/03/19 22:31	56-23-5	
Chlorobenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	108-90-7	
Chloroethane	**<0.83**	ug/m3	0.83	1.55		11/03/19 22:31	75-00-3	
Chloroform	**1.3**	ug/m3	0.77	1.55		11/03/19 22:31	67-66-3	
Chloromethane	**<0.65**	ug/m3	0.65	1.55		11/03/19 22:31	74-87-3	
Cyclohexane	**<2.7**	ug/m3	2.7	1.55		11/03/19 22:31	110-82-7	
Dibromochloromethane	**<2.7**	ug/m3	2.7	1.55		11/03/19 22:31	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	106-93-4	
1,2-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 22:31	95-50-1	
1,3-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 22:31	541-73-1	
1,4-Dichlorobenzene	**<4.7**	ug/m3	4.7	1.55		11/03/19 22:31	106-46-7	
Dichlorodifluoromethane	**3.1**	ug/m3	1.6	1.55		11/03/19 22:31	75-71-8	
1,1-Dichloroethane	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	75-34-3	
1,2-Dichloroethane	**<0.64**	ug/m3	0.64	1.55		11/03/19 22:31	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	156-59-2	
trans-1,2-Dichloroethene	**9.9**	ug/m3	1.2	1.55		11/03/19 22:31	156-60-5	
1,2-Dichloropropane	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	10061-02-6	
Dichlorotetrafluoroethane	**<2.2**	ug/m3	2.2	1.55		11/03/19 22:31	76-14-2	
Ethanol	**6.3**	ug/m3	3.0	1.55		11/03/19 22:31	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	141-78-6	
Ethylbenzene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	100-41-4	
4-Ethyltoluene	**<3.9**	ug/m3	3.9	1.55		11/03/19 22:31	622-96-8	
n-Heptane	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	142-82-5	
Hexachloro-1,3-butadiene	**<8.4**	ug/m3	8.4	1.55		11/03/19 22:31	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	110-54-3	
2-Hexanone	**<6.4**	ug/m3	6.4	1.55		11/03/19 22:31	591-78-6	
Methylene Chloride	**<5.5**	ug/m3	5.5	1.55		11/03/19 22:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.4**	ug/m3	6.4	1.55		11/03/19 22:31	108-10-1	
Methyl-tert-butyl ether	**<5.7**	ug/m3	5.7	1.55		11/03/19 22:31	1634-04-4	
Naphthalene	**<4.1**	ug/m3	4.1	1.55		11/03/19 22:31	91-20-3	
2-Propanol	**<3.9**	ug/m3	3.9	1.55		11/03/19 22:31	67-63-0	
Propylene	**<0.54**	ug/m3	0.54	1.55		11/03/19 22:31	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	79-34-5	
Tetrachloroethene	**4.1**	ug/m3	1.1	1.55		11/03/19 22:31	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: EFFLUENT PORT **Lab ID: 70109447008** Collected: 10/22/19 17:05 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.93**	ug/m3	0.93	1.55		11/03/19 22:31	109-99-9	
Toluene	**6.5**	ug/m3	1.2	1.55		11/03/19 22:31	108-88-3	
1,2,4-Trichlorobenzene	**<11.7**	ug/m3	11.7	1.55		11/03/19 22:31	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.55		11/03/19 22:31	71-55-6	
1,1,2-Trichloroethane	**<0.86**	ug/m3	0.86	1.55		11/03/19 22:31	79-00-5	
Trichloroethene	**<0.85**	ug/m3	0.85	1.55		11/03/19 22:31	79-01-6	
Trichlorofluoromethane	**1.8**	ug/m3	1.8	1.55		11/03/19 22:31	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.4**	ug/m3	2.4	1.55		11/03/19 22:31	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	108-05-4	
Vinyl chloride	**<0.40**	ug/m3	0.40	1.55		11/03/19 22:31	75-01-4	
m&p-Xylene	**3.3**	ug/m3	2.7	1.55		11/03/19 22:31	179601-23-1	
o-Xylene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: INDOOR AMBIENT AIR **Lab ID: 70109447009** Collected: 10/22/19 16:45 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**13.2**	ug/m3	3.6	1.49		11/03/19 23:00	67-64-1	
Benzene	**<0.48**	ug/m3	0.48	1.49		11/03/19 23:00	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 23:00	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 23:00	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 23:00	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 23:00	106-99-0	
2-Butanone (MEK)	**<4.5**	ug/m3	4.5	1.49		11/03/19 23:00	78-93-3	
Carbon disulfide	**2.2**	ug/m3	0.94	1.49		11/03/19 23:00	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 23:00	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 23:00	75-00-3	
Chloroform	**<0.74**	ug/m3	0.74	1.49		11/03/19 23:00	67-66-3	
Chloromethane	**0.83**	ug/m3	0.63	1.49		11/03/19 23:00	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 23:00	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 23:00	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 23:00	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.49		11/03/19 23:00	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 23:00	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 23:00	76-14-2	
Ethanol	**19.0**	ug/m3	2.9	1.49		11/03/19 23:00	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 23:00	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 23:00	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 23:00	591-78-6	
Methylene Chloride	**10.7**	ug/m3	5.3	1.49		11/03/19 23:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 23:00	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 23:00	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 23:00	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 23:00	67-63-0	
Propylene	**<0.52**	ug/m3	0.52	1.49		11/03/19 23:00	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 23:00	79-34-5	
Tetrachloroethene	**263**	ug/m3	1.0	1.49		11/03/19 23:00	127-18-4	

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(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: INDOOR AMBIENT AIR **Lab ID: 70109447009** Collected: 10/22/19 16:45 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 23:00	109-99-9	
Toluene	**2.0**	ug/m3	1.1	1.49		11/03/19 23:00	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 23:00	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 23:00	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 23:00	79-00-5	
Trichloroethene	**46.6**	ug/m3	0.81	1.49		11/03/19 23:00	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 23:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 23:00	76-13-1	
1,2,4-Trimethylbenzene	**1.9**	ug/m3	1.5	1.49		11/03/19 23:00	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 23:00	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 23:00	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	95-47-6	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: OUTDOOR AMBIENT AIR **Lab ID: 70109447010** Collected: 10/22/19 16:55 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.6**	ug/m3	3.5	1.44		11/03/19 23:29	67-64-1	
Benzene	**0.48**	ug/m3	0.47	1.44		11/03/19 23:29	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.44		11/03/19 23:29	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 23:29	75-27-4	
Bromoform	**<7.6**	ug/m3	7.6	1.44		11/03/19 23:29	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	74-83-9	
1,3-Butadiene	**<0.65**	ug/m3	0.65	1.44		11/03/19 23:29	106-99-0	
2-Butanone (MEK)	**<4.3**	ug/m3	4.3	1.44		11/03/19 23:29	78-93-3	
Carbon disulfide	**<0.91**	ug/m3	0.91	1.44		11/03/19 23:29	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	108-90-7	
Chloroethane	**<0.77**	ug/m3	0.77	1.44		11/03/19 23:29	75-00-3	
Chloroform	**<0.71**	ug/m3	0.71	1.44		11/03/19 23:29	67-66-3	
Chloromethane	**0.61**	ug/m3	0.60	1.44		11/03/19 23:29	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	541-73-1	
1,4-Dichlorobenzene	**<4.4**	ug/m3	4.4	1.44		11/03/19 23:29	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.44		11/03/19 23:29	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	75-34-3	
1,2-Dichloroethane	**<0.59**	ug/m3	0.59	1.44		11/03/19 23:29	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 23:29	76-14-2	
Ethanol	**3.4**	ug/m3	2.8	1.44		11/03/19 23:29	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.44		11/03/19 23:29	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	142-82-5	
Hexachloro-1,3-butadiene	**<7.8**	ug/m3	7.8	1.44		11/03/19 23:29	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	110-54-3	
2-Hexanone	**<6.0**	ug/m3	6.0	1.44		11/03/19 23:29	591-78-6	
Methylene Chloride	**<5.1**	ug/m3	5.1	1.44		11/03/19 23:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/m3	6.0	1.44		11/03/19 23:29	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.44		11/03/19 23:29	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.44		11/03/19 23:29	91-20-3	
2-Propanol	**<3.6**	ug/m3	3.6	1.44		11/03/19 23:29	67-63-0	
Propylene	**<0.50**	ug/m3	0.50	1.44		11/03/19 23:29	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	79-34-5	
Tetrachloroethene	**69.7**	ug/m3	0.99	1.44		11/03/19 23:29	127-18-4	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Sample: OUTDOOR AMBIENT AIR **Lab ID: 70109447010** Collected: 10/22/19 16:55 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.86**	ug/m3	0.86	1.44		11/03/19 23:29	109-99-9	
Toluene	**1.5**	ug/m3	1.1	1.44		11/03/19 23:29	108-88-3	
1,2,4-Trichlorobenzene	**<10.9**	ug/m3	10.9	1.44		11/03/19 23:29	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 23:29	71-55-6	
1,1,2-Trichloroethane	**<0.80**	ug/m3	0.80	1.44		11/03/19 23:29	79-00-5	
Trichloroethene	**<0.79**	ug/m3	0.79	1.44		11/03/19 23:29	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 23:29	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.44		11/03/19 23:29	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.44		11/03/19 23:29	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	95-47-6	

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

QC Batch: 642603 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.56	0.56	11/03/19 10:03	
1,1,2,2-Tetrachloroethane	ug/m3	<0.35	0.35	11/03/19 10:03	
1,1,2-Trichloroethane	ug/m3	<0.28	0.28	11/03/19 10:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.78	0.78	11/03/19 10:03	
1,1-Dichloroethane	ug/m3	<0.41	0.41	11/03/19 10:03	
1,1-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
1,2,4-Trichlorobenzene	ug/m3	<3.8	3.8	11/03/19 10:03	
1,2,4-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,2-Dibromoethane (EDB)	ug/m3	<0.39	0.39	11/03/19 10:03	
1,2-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,2-Dichloroethane	ug/m3	<0.21	0.21	11/03/19 10:03	
1,2-Dichloropropane	ug/m3	<0.47	0.47	11/03/19 10:03	
1,3,5-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,3-Butadiene	ug/m3	<0.22	0.22	11/03/19 10:03	
1,3-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,4-Dichlorobenzene	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Butanone (MEK)	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Hexanone	ug/m3	<2.1	2.1	11/03/19 10:03	
2-Propanol	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Ethyltoluene	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	<2.1	2.1	11/03/19 10:03	
Acetone	ug/m3	<1.2	1.2	11/03/19 10:03	
Benzene	ug/m3	<0.16	0.16	11/03/19 10:03	
Benzyl chloride	ug/m3	<1.3	1.3	11/03/19 10:03	
Bromodichloromethane	ug/m3	<0.68	0.68	11/03/19 10:03	
Bromoform	ug/m3	<2.6	2.6	11/03/19 10:03	
Bromomethane	ug/m3	<0.39	0.39	11/03/19 10:03	
Carbon disulfide	ug/m3	<0.32	0.32	11/03/19 10:03	
Carbon tetrachloride	ug/m3	<0.64	0.64	11/03/19 10:03	
Chlorobenzene	ug/m3	<0.47	0.47	11/03/19 10:03	
Chloroethane	ug/m3	<0.27	0.27	11/03/19 10:03	
Chloroform	ug/m3	<0.25	0.25	11/03/19 10:03	
Chloromethane	ug/m3	<0.21	0.21	11/03/19 10:03	
cis-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
cis-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Cyclohexane	ug/m3	<0.88	0.88	11/03/19 10:03	
Dibromochloromethane	ug/m3	<0.86	0.86	11/03/19 10:03	
Dichlorodifluoromethane	ug/m3	<0.50	0.50	11/03/19 10:03	
Dichlorotetrafluoroethane	ug/m3	<0.71	0.71	11/03/19 10:03	
Ethanol	ug/m3	<0.96	0.96	11/03/19 10:03	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

METHOD BLANK: 3460707 Matrix: Air

Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethyl acetate	ug/m3	<0.37	0.37	11/03/19 10:03	
Ethylbenzene	ug/m3	<0.44	0.44	11/03/19 10:03	
Hexachloro-1,3-butadiene	ug/m3	<2.7	2.7	11/03/19 10:03	
m&p-Xylene	ug/m3	<0.88	0.88	11/03/19 10:03	
Methyl-tert-butyl ether	ug/m3	<1.8	1.8	11/03/19 10:03	
Methylene Chloride	ug/m3	<1.8	1.8	11/03/19 10:03	
n-Heptane	ug/m3	<0.42	0.42	11/03/19 10:03	
n-Hexane	ug/m3	<0.36	0.36	11/03/19 10:03	
Naphthalene	ug/m3	<1.3	1.3	11/03/19 10:03	
o-Xylene	ug/m3	<0.44	0.44	11/03/19 10:03	
Propylene	ug/m3	<0.18	0.18	11/03/19 10:03	
Styrene	ug/m3	<0.43	0.43	11/03/19 10:03	
Tetrachloroethene	ug/m3	<0.34	0.34	11/03/19 10:03	
Tetrahydrofuran	ug/m3	<0.30	0.30	11/03/19 10:03	
Toluene	ug/m3	<0.38	0.38	11/03/19 10:03	
trans-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
trans-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Trichloroethene	ug/m3	<0.27	0.27	11/03/19 10:03	
Trichlorofluoromethane	ug/m3	<0.57	0.57	11/03/19 10:03	
Vinyl acetate	ug/m3	<0.36	0.36	11/03/19 10:03	
Vinyl chloride	ug/m3	<0.13	0.13	11/03/19 10:03	

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	58.6	106	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	68.8	99	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	60.8	110	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	86.1	111	70-130	
1,1-Dichloroethane	ug/m3	41.1	41.7	101	70-130	
1,1-Dichloroethene	ug/m3	40.3	44.2	110	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	91.1	121	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	54.2	109	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	85.8	110	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	69.3	113	70-132	
1,2-Dichloroethane	ug/m3	41.1	42.5	103	70-130	
1,2-Dichloropropane	ug/m3	47	49.9	106	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	56.1	112	70-132	
1,3-Butadiene	ug/m3	22.5	26.6	118	65-130	
1,3-Dichlorobenzene	ug/m3	61.1	69.0	113	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	69.8	114	70-134	
2-Butanone (MEK)	ug/m3	30	32.6	109	70-130	
2-Hexanone	ug/m3	41.6	39.1	94	70-135	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Propanol	ug/m3	125	130	104	68-130	
4-Ethyltoluene	ug/m3	50	55.0	110	70-138	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	40.5	97	70-131	
Acetone	ug/m3	121	125	103	67-130	
Benzene	ug/m3	32.5	33.1	102	70-130	
Benzyl chloride	ug/m3	52.6	50.4	96	70-130	
Bromodichloromethane	ug/m3	68.1	70.0	103	70-130	
Bromoform	ug/m3	105	116	110	70-132	
Bromomethane	ug/m3	39.5	46.0	117	69-130	
Carbon disulfide	ug/m3	31.6	36.1	114	56-137	
Carbon tetrachloride	ug/m3	64	65.0	102	66-131	
Chlorobenzene	ug/m3	46.8	50.2	107	70-130	
Chloroethane	ug/m3	26.8	32.6	122	70-130	
Chloroform	ug/m3	49.6	49.7	100	70-130	
Chloromethane	ug/m3	21	22.2	106	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	46.3	115	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	47.7	103	70-133	
Cyclohexane	ug/m3	35	37.7	108	68-132	
Dibromochloromethane	ug/m3	86.6	97.0	112	70-130	
Dichlorodifluoromethane	ug/m3	50.3	50.0	99	70-130	
Dichlorotetrafluoroethane	ug/m3	71	76.5	108	70-130	
Ethanol	ug/m3	95.8	99.6	104	68-133	
Ethyl acetate	ug/m3	36.6	36.8	100	69-130	
Ethylbenzene	ug/m3	44.1	47.4	107	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	142	131	66-137	CH
m&p-Xylene	ug/m3	88.3	96.7	110	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	43.6	119	70-130	
Methylene Chloride	ug/m3	177	173	98	65-130	
n-Heptane	ug/m3	41.7	43.4	104	65-130	
n-Hexane	ug/m3	35.8	35.1	98	66-130	
Naphthalene	ug/m3	53.3	48.3	91	56-130	
o-Xylene	ug/m3	44.1	47.7	108	70-130	
Propylene	ug/m3	17.5	17.5	100	67-130	
Styrene	ug/m3	43.3	46.7	108	69-136	
Tetrachloroethene	ug/m3	68.9	84.4	122	70-130	
Tetrahydrofuran	ug/m3	30	31.8	106	68-131	
Toluene	ug/m3	38.3	41.1	107	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	46.0	114	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	47.6	103	70-134	
Trichloroethene	ug/m3	54.6	66.0	121	70-130	
Trichlorofluoromethane	ug/m3	57.1	61.8	108	65-130	
Vinyl acetate	ug/m3	35.8	40.6	114	61-133	
Vinyl chloride	ug/m3	26	31.4	121	70-130	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.5		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.94		
1,1,2-Trichloroethane	ug/m3	ND	<0.74		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.1		
1,1-Dichloroethane	ug/m3	ND	<1.1		
1,1-Dichloroethene	ug/m3	ND	<1.1		
1,2,4-Trichlorobenzene	ug/m3	ND	<10.1		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.3		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.0		
1,2-Dichlorobenzene	ug/m3	ND	<1.6		
1,2-Dichloroethane	ug/m3	ND	<0.55		
1,2-Dichloropropane	ug/m3	ND	<1.3		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.3		
1,3-Butadiene	ug/m3	ND	<0.60		
1,3-Dichlorobenzene	ug/m3	ND	<1.6		
1,4-Dichlorobenzene	ug/m3	ND	<4.1		
2-Butanone (MEK)	ug/m3	ND	<4.0		
2-Hexanone	ug/m3	ND	<5.6		
2-Propanol	ug/m3	ND	<3.4		
4-Ethyltoluene	ug/m3	ND	<3.4		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<5.6		
Acetone	ug/m3	5.2	5.1	2	
Benzene	ug/m3	0.47	0.44	6	
Benzyl chloride	ug/m3	ND	<3.5		
Bromodichloromethane	ug/m3	ND	<1.8		
Bromoform	ug/m3	ND	<7.0		
Bromomethane	ug/m3	ND	<1.1		
Carbon disulfide	ug/m3	ND	<0.85		
Carbon tetrachloride	ug/m3	ND	<1.7		
Chlorobenzene	ug/m3	ND	<1.3		
Chloroethane	ug/m3	ND	<0.72		
Chloroform	ug/m3	ND	<0.66		
Chloromethane	ug/m3	0.70	0.67	4	
cis-1,2-Dichloroethene	ug/m3	ND	<1.1		
cis-1,3-Dichloropropene	ug/m3	ND	<1.2		
Cyclohexane	ug/m3	ND	<2.3		
Dibromochloromethane	ug/m3	ND	<2.3		
Dichlorodifluoromethane	ug/m3	2.3	2.3	2	
Dichlorotetrafluoroethane	ug/m3	ND	<1.9		
Ethanol	ug/m3	ND	<2.6		
Ethyl acetate	ug/m3	ND	<0.98		
Ethylbenzene	ug/m3	ND	<1.2		
Hexachloro-1,3-butadiene	ug/m3	ND	<7.3		
m&p-Xylene	ug/m3	ND	<2.4		
Methyl-tert-butyl ether	ug/m3	ND	<4.9		
Methylene Chloride	ug/m3	ND	<4.7		
n-Heptane	ug/m3	ND	<1.1		

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
n-Hexane	ug/m3	ND	<0.96		
Naphthalene	ug/m3	ND	<3.6		
o-Xylene	ug/m3	ND	<1.2		
Propylene	ug/m3	ND	<0.47		
Styrene	ug/m3	ND	<1.2		
Tetrachloroethene	ug/m3	ND	<0.92		
Tetrahydrofuran	ug/m3	ND	<0.80		
Toluene	ug/m3	1.3	1.2	8	
trans-1,2-Dichloroethene	ug/m3	ND	<1.1		
trans-1,3-Dichloropropene	ug/m3	ND	<1.2		
Trichloroethene	ug/m3	ND	<0.73		
Trichlorofluoromethane	ug/m3	ND	<1.5		
Vinyl acetate	ug/m3	ND	<0.96		
Vinyl chloride	ug/m3	ND	<0.35		

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.8		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<1.1		
1,1,2-Trichloroethane	ug/m3	ND	<0.88		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.5		
1,1-Dichloroethane	ug/m3	ND	<1.3		
1,1-Dichloroethene	ug/m3	ND	<1.3		
1,2,4-Trichlorobenzene	ug/m3	ND	<11.9		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.6		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.2		
1,2-Dichlorobenzene	ug/m3	ND	<1.9		
1,2-Dichloroethane	ug/m3	ND	<0.65		
1,2-Dichloropropane	ug/m3	ND	<1.5		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.6		
1,3-Butadiene	ug/m3	ND	<0.71		
1,3-Dichlorobenzene	ug/m3	ND	<1.9		
1,4-Dichlorobenzene	ug/m3	ND	<4.8		
2-Butanone (MEK)	ug/m3	ND	<4.7		
2-Hexanone	ug/m3	ND	<6.6		
2-Propanol	ug/m3	ND	<4.0		
4-Ethyltoluene	ug/m3	ND	<4.0		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<6.6		
Acetone	ug/m3	15.7	15.8	1	
Benzene	ug/m3	1.5	1.5	1	
Benzyl chloride	ug/m3	ND	<4.2		
Bromodichloromethane	ug/m3	ND	<2.1		
Bromoform	ug/m3	ND	<8.3		
Bromomethane	ug/m3	ND	<1.2		

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Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
Carbon disulfide	ug/m3	ND	<1.0		
Carbon tetrachloride	ug/m3	ND	<2.0		
Chlorobenzene	ug/m3	ND	<1.5		
Chloroethane	ug/m3	ND	<0.85		
Chloroform	ug/m3	ND	<0.78		
Chloromethane	ug/m3	ND	0.81		
cis-1,2-Dichloroethene	ug/m3	ND	<1.3		
cis-1,3-Dichloropropene	ug/m3	ND	<1.5		
Cyclohexane	ug/m3	ND	<2.8		
Dibromochloromethane	ug/m3	ND	<2.7		
Dichlorodifluoromethane	ug/m3	2.4	2.4	2	
Dichlorotetrafluoroethane	ug/m3	ND	<2.2		
Ethanol	ug/m3	ND	<3.0		
Ethyl acetate	ug/m3	ND	<1.2		
Ethylbenzene	ug/m3	ND	<1.4		
Hexachloro-1,3-butadiene	ug/m3	ND	<8.6		
m&p-Xylene	ug/m3	ND	<2.8		
Methyl-tert-butyl ether	ug/m3	ND	<5.8		
Methylene Chloride	ug/m3	5.7	5.8	2	
n-Heptane	ug/m3	ND	<1.3		
n-Hexane	ug/m3	ND	<1.1		
Naphthalene	ug/m3	ND	<4.2		
o-Xylene	ug/m3	ND	<1.4		
Propylene	ug/m3	ND	<0.55		
Styrene	ug/m3	ND	<1.4		
Tetrachloroethene	ug/m3	ND	<1.1		
Tetrahydrofuran	ug/m3	ND	<0.95		
Toluene	ug/m3	1.5	1.5	1	
trans-1,2-Dichloroethene	ug/m3	ND	<1.3		
trans-1,3-Dichloropropene	ug/m3	ND	<1.5		
Trichloroethene	ug/m3	ND	<0.86		
Trichlorofluoromethane	ug/m3	ND	<1.8		
Vinyl acetate	ug/m3	ND	<1.1		
Vinyl chloride	ug/m3	ND	<0.41		

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BAYVILLE VILLAGE DRY CLEANERS
Pace Project No.: 70109447

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70109447001	**PPB-1**	TO-15	642603		
70109447002	**PP-2**	TO-15	642603		
70109447003	**PP-3**	TO-15	642603		
70109447004	**PP-4**	TO-15	642603		
70109447005	**PPB-5**	TO-15	642603		
70109447006	**PPB-6**	TO-15	642603		
70109447007	**INFLUENT PORT**	TO-15	642603		
70109447008	**EFFLUENT PORT**	TO-15	642603		
70109447009	**INDOOR AMBIENT AIR**	TO-15	642603		
70109447010	**OUTDOOR AMBIENT AIR**	TO-15	642603		

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AIR: CHAIN-OF-CUST

The Chain-of-Custody is a LEGAL DOCUMENT

WO# : 70109447

70109447

Section A
Required Client Information:

Company: Cashin Associates
Address: 1200 Veterans Memorial Hwy
Hauppauge NY 11788
Email To: MCalifano@ca-pc.com
Phone: 631-348-7600 Fax: 631-348-7601
Requested Due Date/TAT: STD

Section B
Required Project Information:

Report To: Cashin Associates
Copy To: Thomas Ryan
Marc Califano
Purchase Order No.:
Project Name: Bayville Village Dry Cleaners
Project Number: 13CTS.030T7

Section C
Invoice Information:

Attention: Thomas Ryan
Company Name: Bayville Cleaners
Address: 19 Todd Dr. Glen Head NY
Pace Quote Reference: 115145
Pace Project Manager/Sales Rep.
Pace Profile #: 38414

Program
☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act
☑ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other___

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	PPB-1	6LC		10-22-19	8:55	10-22-19	4:35	-30	-2	2099	1447					✓					001
2	PP-2	6LC		10-22-19	9:03	10-22-19	5:00	-30	-3	2798	0306					✓					002
3	PP-3	6LC		10-22-19	9:41	10-22-19	5:40	-29	-14	2319	1796					✓					003
4	PP-4	6LC		10-22-19	8:30	10-22-19	4:25	-30	-2	3555	0434					✓					004
5	PPB-5	6LC		10-22-19	8:35	10-22-19	3:47	-28	-2	2712	0088					✓					005
6	PPB-6	6LC		10-22-19	8:46	10-22-19	4:00	-29	-4	1211	2100					✓					006
7	Influent Port	6LC		10-22-19	9:20	10-22-19	5:25	-30	-4	7946	1789					✓					007
8	Effluent Port	6LC		10-22-19	9:37	10-22-19	5:05	-30	-4	2022	0334					✓					008
9	Indoor Ambient Air	6LC		10-22-19	9:12	10-22-19	4:45	-30	-3	0558	1438					✓					009
10	Outdoor Ambient Air	6LC		10-22-19	9:07	10-22-19	4:55	-30	-2	2688	0078					✓					010
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Marc Califano CASHIN	10/23/19	12:50	[illegible] Pace	10/23/19	12:51

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARC CALIFANO CASHIN

SIGNATURE of SAMPLER: Marc Califano DATE Signed (MM / DD / YY): 10/23/19

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

Pace Analytical

Sample Condition Upon Receipt

WO#:70109447
PM: STS Due Date: 11/06/19
CLIENT: CAS-ECO

Client Name: CAS ECO

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziplock ☐ None ☐ Other

Type of Ice: Wet Blue None

Thermometer Used: TH091 Correction Factor: +0.2

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): N/A Cooler Temperature Corrected (°C): NA

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample) Date and Initials of person examining contents: JK 10/23/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested:	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix SL WT OIL (WT)	☑Yes	☐No		12.
All containers needing preservation have been checked pH paper Lot #	☐Yes	☐No	☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☑N/A	Sample #
				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐Yes	☐No	☑N/A	14. Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 05, 2019

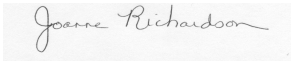
Sophia Sparkes
Pace Analytical Services
575 Broad Hollow Road
Melville, NY 11747

RE: Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Dear Sophia Sparkes:
Enclosed are the analytical results for sample(s) received by the laboratory on October 24, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joanne M Richardson
joanne.richardson@pacelabs.com
1(612)607-6453
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

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(612)607-1700

SAMPLE ANALYTE COUNT

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70109447001	**PPB-1**	TO-15	MJL	61	PASI-M
70109447002	**PP-2**	TO-15	MJL	61	PASI-M
70109447003	**PP-3**	TO-15	MJL	61	PASI-M
70109447004	**PP-4**	TO-15	MJL	61	PASI-M
70109447005	**PPB-5**	TO-15	MJL	61	PASI-M
70109447006	**PPB-6**	TO-15	MJL	61	PASI-M
70109447007	**INFLUENT PORT**	TO-15	MJL	61	PASI-M
70109447008	**EFFLUENT PORT**	TO-15	MJL	61	PASI-M
70109447009	**INDOOR AMBIENT AIR**	TO-15	MJL	61	PASI-M
70109447010	**OUTDOOR AMBIENT AIR**	TO-15	MJL	61	PASI-M

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-1 **Lab ID: 70109447001** Collected: 10/22/19 16:35 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**12.8**	ug/m3	3.5	1.44		11/03/19 19:08	67-64-1	
Benzene	**<0.47**	ug/m3	0.47	1.44		11/03/19 19:08	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.44		11/03/19 19:08	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 19:08	75-27-4	
Bromoform	**<7.6**	ug/m3	7.6	1.44		11/03/19 19:08	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	74-83-9	
1,3-Butadiene	**<0.65**	ug/m3	0.65	1.44		11/03/19 19:08	106-99-0	
2-Butanone (MEK)	**<4.3**	ug/m3	4.3	1.44		11/03/19 19:08	78-93-3	
Carbon disulfide	**<0.91**	ug/m3	0.91	1.44		11/03/19 19:08	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	108-90-7	
Chloroethane	**<0.77**	ug/m3	0.77	1.44		11/03/19 19:08	75-00-3	
Chloroform	**3.7**	ug/m3	0.71	1.44		11/03/19 19:08	67-66-3	
Chloromethane	**<0.60**	ug/m3	0.60	1.44		11/03/19 19:08	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 19:08	541-73-1	
1,4-Dichlorobenzene	**<4.4**	ug/m3	4.4	1.44		11/03/19 19:08	106-46-7	
Dichlorodifluoromethane	**3.6**	ug/m3	1.5	1.44		11/03/19 19:08	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	75-34-3	
1,2-Dichloroethane	**<0.59**	ug/m3	0.59	1.44		11/03/19 19:08	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 19:08	76-14-2	
Ethanol	**<2.8**	ug/m3	2.8	1.44		11/03/19 19:08	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.44		11/03/19 19:08	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.44		11/03/19 19:08	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	142-82-5	
Hexachloro-1,3-butadiene	**<7.8**	ug/m3	7.8	1.44		11/03/19 19:08	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	110-54-3	
2-Hexanone	**<6.0**	ug/m3	6.0	1.44		11/03/19 19:08	591-78-6	
Methylene Chloride	**<5.1**	ug/m3	5.1	1.44		11/03/19 19:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/m3	6.0	1.44		11/03/19 19:08	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.44		11/03/19 19:08	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.44		11/03/19 19:08	91-20-3	
2-Propanol	**<3.6**	ug/m3	3.6	1.44		11/03/19 19:08	67-63-0	
Propylene	**<0.50**	ug/m3	0.50	1.44		11/03/19 19:08	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.44		11/03/19 19:08	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	79-34-5	
Tetrachloroethene	**434**	ug/m3	9.9	14.4		11/04/19 18:34	127-18-4	

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(612)607-1700

ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-1 **Lab ID: 70109447001** Collected: 10/22/19 16:35 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.86**	ug/m3	0.86	1.44		11/03/19 19:08	109-99-9	
Toluene	**1.2**	ug/m3	1.1	1.44		11/03/19 19:08	108-88-3	
1,2,4-Trichlorobenzene	**<10.9**	ug/m3	10.9	1.44		11/03/19 19:08	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 19:08	71-55-6	
1,1,2-Trichloroethane	**<0.80**	ug/m3	0.80	1.44		11/03/19 19:08	79-00-5	
Trichloroethene	**5.5**	ug/m3	0.79	1.44		11/03/19 19:08	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 19:08	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.44		11/03/19 19:08	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 19:08	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.44		11/03/19 19:08	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.44		11/03/19 19:08	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.44		11/03/19 19:08	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.44		11/03/19 19:08	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-2 **Lab ID: 70109447002** Collected: 10/22/19 17:00 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**26.4**	ug/m3	3.4	1.41		11/03/19 19:37	67-64-1	
Benzene	**1.5**	ug/m3	0.46	1.41		11/03/19 19:37	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.41		11/03/19 19:37	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.41		11/03/19 19:37	75-27-4	
Bromoform	**<7.4**	ug/m3	7.4	1.41		11/03/19 19:37	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.41		11/03/19 19:37	106-99-0	
2-Butanone (MEK)	**114**	ug/m3	4.2	1.41		11/03/19 19:37	78-93-3	
Carbon disulfide	**<0.89**	ug/m3	0.89	1.41		11/03/19 19:37	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.41		11/03/19 19:37	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	108-90-7	
Chloroethane	**<0.76**	ug/m3	0.76	1.41		11/03/19 19:37	75-00-3	
Chloroform	**<0.70**	ug/m3	0.70	1.41		11/03/19 19:37	67-66-3	
Chloromethane	**<0.59**	ug/m3	0.59	1.41		11/03/19 19:37	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.41		11/03/19 19:37	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.41		11/03/19 19:37	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.41		11/03/19 19:37	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.41		11/03/19 19:37	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.41		11/03/19 19:37	106-46-7	
Dichlorodifluoromethane	**2.2**	ug/m3	1.4	1.41		11/03/19 19:37	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	75-34-3	
1,2-Dichloroethane	**<0.58**	ug/m3	0.58	1.41		11/03/19 19:37	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.41		11/03/19 19:37	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.41		11/03/19 19:37	76-14-2	
Ethanol	**8.9**	ug/m3	2.7	1.41		11/03/19 19:37	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.41		11/03/19 19:37	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	142-82-5	
Hexachloro-1,3-butadiene	**<7.6**	ug/m3	7.6	1.41		11/03/19 19:37	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	110-54-3	
2-Hexanone	**7.8**	ug/m3	5.9	1.41		11/03/19 19:37	591-78-6	
Methylene Chloride	**5.3**	ug/m3	5.0	1.41		11/03/19 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.9**	ug/m3	5.9	1.41		11/03/19 19:37	108-10-1	
Methyl-tert-butyl ether	**<5.2**	ug/m3	5.2	1.41		11/03/19 19:37	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.41		11/03/19 19:37	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.41		11/03/19 19:37	67-63-0	
Propylene	**10.7**	ug/m3	0.49	1.41		11/03/19 19:37	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.98**	ug/m3	0.98	1.41		11/03/19 19:37	79-34-5	
Tetrachloroethene	**172**	ug/m3	0.97	1.41		11/03/19 19:37	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-2 **Lab ID: 70109447002** Collected: 10/22/19 17:00 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.85**	ug/m3	0.85	1.41		11/03/19 19:37	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.41		11/03/19 19:37	108-88-3	
1,2,4-Trichlorobenzene	**<10.6**	ug/m3	10.6	1.41		11/03/19 19:37	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.41		11/03/19 19:37	71-55-6	
1,1,2-Trichloroethane	**<0.78**	ug/m3	0.78	1.41		11/03/19 19:37	79-00-5	
Trichloroethene	**<0.77**	ug/m3	0.77	1.41		11/03/19 19:37	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.41		11/03/19 19:37	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.41		11/03/19 19:37	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.41		11/03/19 19:37	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.41		11/03/19 19:37	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.41		11/03/19 19:37	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.41		11/03/19 19:37	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.41		11/03/19 19:37	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.41		11/03/19 19:37	95-47-6	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-3 **Lab ID: 70109447003** Collected: 10/22/19 17:40 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**90.0**	ug/m3	6.1	2.52		11/03/19 20:06	67-64-1	
Benzene	**1.9**	ug/m3	0.82	2.52		11/03/19 20:06	71-43-2	
Benzyl chloride	**<6.6**	ug/m3	6.6	2.52		11/03/19 20:06	100-44-7	
Bromodichloromethane	**<3.4**	ug/m3	3.4	2.52		11/03/19 20:06	75-27-4	
Bromoform	**<13.2**	ug/m3	13.2	2.52		11/03/19 20:06	75-25-2	
Bromomethane	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	74-83-9	
1,3-Butadiene	**<1.1**	ug/m3	1.1	2.52		11/03/19 20:06	106-99-0	
2-Butanone (MEK)	**14.4**	ug/m3	7.6	2.52		11/03/19 20:06	78-93-3	
Carbon disulfide	**<1.6**	ug/m3	1.6	2.52		11/03/19 20:06	75-15-0	
Carbon tetrachloride	**<3.2**	ug/m3	3.2	2.52		11/03/19 20:06	56-23-5	
Chlorobenzene	**<2.4**	ug/m3	2.4	2.52		11/03/19 20:06	108-90-7	
Chloroethane	**<1.4**	ug/m3	1.4	2.52		11/03/19 20:06	75-00-3	
Chloroform	**1.5**	ug/m3	1.2	2.52		11/03/19 20:06	67-66-3	
Chloromethane	**<1.1**	ug/m3	1.1	2.52		11/03/19 20:06	74-87-3	
Cyclohexane	**<4.4**	ug/m3	4.4	2.52		11/03/19 20:06	110-82-7	
Dibromochloromethane	**<4.4**	ug/m3	4.4	2.52		11/03/19 20:06	124-48-1	
1,2-Dibromoethane (EDB)	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	106-93-4	
1,2-Dichlorobenzene	**<3.1**	ug/m3	3.1	2.52		11/03/19 20:06	95-50-1	
1,3-Dichlorobenzene	**<3.1**	ug/m3	3.1	2.52		11/03/19 20:06	541-73-1	
1,4-Dichlorobenzene	**<7.7**	ug/m3	7.7	2.52		11/03/19 20:06	106-46-7	
Dichlorodifluoromethane	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	75-71-8	
1,1-Dichloroethane	**<2.1**	ug/m3	2.1	2.52		11/03/19 20:06	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/m3	1.0	2.52		11/03/19 20:06	107-06-2	
1,1-Dichloroethene	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	75-35-4	
cis-1,2-Dichloroethene	**8.1**	ug/m3	2.0	2.52		11/03/19 20:06	156-59-2	
trans-1,2-Dichloroethene	**<2.0**	ug/m3	2.0	2.52		11/03/19 20:06	156-60-5	
1,2-Dichloropropane	**<2.4**	ug/m3	2.4	2.52		11/03/19 20:06	78-87-5	
cis-1,3-Dichloropropene	**<2.3**	ug/m3	2.3	2.52		11/03/19 20:06	10061-01-5	
trans-1,3-Dichloropropene	**<2.3**	ug/m3	2.3	2.52		11/03/19 20:06	10061-02-6	
Dichlorotetrafluoroethane	**<3.6**	ug/m3	3.6	2.52		11/03/19 20:06	76-14-2	
Ethanol	**5.1**	ug/m3	4.8	2.52		11/03/19 20:06	64-17-5	
Ethyl acetate	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	141-78-6	
Ethylbenzene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	100-41-4	
4-Ethyltoluene	**<6.3**	ug/m3	6.3	2.52		11/03/19 20:06	622-96-8	
n-Heptane	**<2.1**	ug/m3	2.1	2.52		11/03/19 20:06	142-82-5	
Hexachloro-1,3-butadiene	**<13.7**	ug/m3	13.7	2.52		11/03/19 20:06	87-68-3	
n-Hexane	**4.3**	ug/m3	1.8	2.52		11/03/19 20:06	110-54-3	
2-Hexanone	**<10.5**	ug/m3	10.5	2.52		11/03/19 20:06	591-78-6	
Methylene Chloride	**35.9**	ug/m3	8.9	2.52		11/03/19 20:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<10.5**	ug/m3	10.5	2.52		11/03/19 20:06	108-10-1	
Methyl-tert-butyl ether	**<9.2**	ug/m3	9.2	2.52		11/03/19 20:06	1634-04-4	
Naphthalene	**<6.7**	ug/m3	6.7	2.52		11/03/19 20:06	91-20-3	
2-Propanol	**<6.3**	ug/m3	6.3	2.52		11/03/19 20:06	67-63-0	
Propylene	**1.4**	ug/m3	0.88	2.52		11/03/19 20:06	115-07-1	
Styrene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	79-34-5	
Tetrachloroethene	**463**	ug/m3	8.7	12.6		11/04/19 18:04	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-3 **Lab ID: 70109447003** Collected: 10/22/19 17:40 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<1.5**	ug/m3	1.5	2.52		11/03/19 20:06	109-99-9	
Toluene	**<1.9**	ug/m3	1.9	2.52		11/03/19 20:06	108-88-3	
1,2,4-Trichlorobenzene	**<19.0**	ug/m3	19.0	2.52		11/03/19 20:06	120-82-1	
1,1,1-Trichloroethane	**<2.8**	ug/m3	2.8	2.52		11/03/19 20:06	71-55-6	
1,1,2-Trichloroethane	**<1.4**	ug/m3	1.4	2.52		11/03/19 20:06	79-00-5	
Trichloroethene	**9.0**	ug/m3	1.4	2.52		11/03/19 20:06	79-01-6	
Trichlorofluoromethane	**<2.9**	ug/m3	2.9	2.52		11/03/19 20:06	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<3.9**	ug/m3	3.9	2.52		11/03/19 20:06	76-13-1	
1,2,4-Trimethylbenzene	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	95-63-6	
1,3,5-Trimethylbenzene	**<2.5**	ug/m3	2.5	2.52		11/03/19 20:06	108-67-8	
Vinyl acetate	**<1.8**	ug/m3	1.8	2.52		11/03/19 20:06	108-05-4	
Vinyl chloride	**<0.66**	ug/m3	0.66	2.52		11/03/19 20:06	75-01-4	
m&p-Xylene	**<4.5**	ug/m3	4.5	2.52		11/03/19 20:06	179601-23-1	
o-Xylene	**<2.2**	ug/m3	2.2	2.52		11/03/19 20:06	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-4 **Lab ID: 70109447004** Collected: 10/22/19 16:25 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.8**	ug/m3	3.3	1.39		11/03/19 20:35	67-64-1	
Benzene	**<0.45**	ug/m3	0.45	1.39		11/03/19 20:35	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.39		11/03/19 20:35	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.39		11/03/19 20:35	75-27-4	
Bromoform	**<7.3**	ug/m3	7.3	1.39		11/03/19 20:35	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.39		11/03/19 20:35	106-99-0	
2-Butanone (MEK)	**<4.2**	ug/m3	4.2	1.39		11/03/19 20:35	78-93-3	
Carbon disulfide	**<0.88**	ug/m3	0.88	1.39		11/03/19 20:35	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.39		11/03/19 20:35	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	108-90-7	
Chloroethane	**<0.75**	ug/m3	0.75	1.39		11/03/19 20:35	75-00-3	
Chloroform	**2.8**	ug/m3	0.69	1.39		11/03/19 20:35	67-66-3	
Chloromethane	**<0.58**	ug/m3	0.58	1.39		11/03/19 20:35	74-87-3	
Cyclohexane	**<2.4**	ug/m3	2.4	1.39		11/03/19 20:35	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.39		11/03/19 20:35	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 20:35	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 20:35	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.39		11/03/19 20:35	106-46-7	
Dichlorodifluoromethane	**2.1**	ug/m3	1.4	1.39		11/03/19 20:35	75-71-8	
1,1-Dichloroethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	75-34-3	
1,2-Dichloroethane	**<0.57**	ug/m3	0.57	1.39		11/03/19 20:35	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 20:35	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.39		11/03/19 20:35	76-14-2	
Ethanol	**4.7**	ug/m3	2.7	1.39		11/03/19 20:35	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.39		11/03/19 20:35	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	142-82-5	
Hexachloro-1,3-butadiene	**<7.5**	ug/m3	7.5	1.39		11/03/19 20:35	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	110-54-3	
2-Hexanone	**<5.8**	ug/m3	5.8	1.39		11/03/19 20:35	591-78-6	
Methylene Chloride	**<4.9**	ug/m3	4.9	1.39		11/03/19 20:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.8**	ug/m3	5.8	1.39		11/03/19 20:35	108-10-1	
Methyl-tert-butyl ether	**<5.1**	ug/m3	5.1	1.39		11/03/19 20:35	1634-04-4	
Naphthalene	**<3.7**	ug/m3	3.7	1.39		11/03/19 20:35	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.39		11/03/19 20:35	67-63-0	
Propylene	**<0.49**	ug/m3	0.49	1.39		11/03/19 20:35	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.97**	ug/m3	0.97	1.39		11/03/19 20:35	79-34-5	
Tetrachloroethene	**399**	ug/m3	19.2	27.8		11/04/19 19:02	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PP-4 **Lab ID: 70109447004** Collected: 10/22/19 16:25 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.83**	ug/m3	0.83	1.39		11/03/19 20:35	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.39		11/03/19 20:35	108-88-3	
1,2,4-Trichlorobenzene	**<10.5**	ug/m3	10.5	1.39		11/03/19 20:35	120-82-1	
1,1,1-Trichloroethane	**<1.5**	ug/m3	1.5	1.39		11/03/19 20:35	71-55-6	
1,1,2-Trichloroethane	**<0.77**	ug/m3	0.77	1.39		11/03/19 20:35	79-00-5	
Trichloroethene	**2.0**	ug/m3	0.76	1.39		11/03/19 20:35	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.39		11/03/19 20:35	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.39		11/03/19 20:35	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 20:35	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 20:35	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 20:35	108-05-4	
Vinyl chloride	**<0.36**	ug/m3	0.36	1.39		11/03/19 20:35	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.39		11/03/19 20:35	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.39		11/03/19 20:35	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-5 **Lab ID: 70109447005** Collected: 10/22/19 15:47 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**9.9**	ug/m3	3.6	1.49		11/03/19 21:04	67-64-1	
Benzene	**0.74**	ug/m3	0.48	1.49		11/03/19 21:04	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 21:04	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 21:04	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 21:04	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 21:04	106-99-0	
2-Butanone (MEK)	**42.3**	ug/m3	4.5	1.49		11/03/19 21:04	78-93-3	
Carbon disulfide	**<0.94**	ug/m3	0.94	1.49		11/03/19 21:04	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 21:04	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 21:04	75-00-3	
Chloroform	**2.3**	ug/m3	0.74	1.49		11/03/19 21:04	67-66-3	
Chloromethane	**<0.63**	ug/m3	0.63	1.49		11/03/19 21:04	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:04	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:04	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 21:04	106-46-7	
Dichlorodifluoromethane	**2.0**	ug/m3	1.5	1.49		11/03/19 21:04	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 21:04	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:04	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 21:04	76-14-2	
Ethanol	**4.8**	ug/m3	2.9	1.49		11/03/19 21:04	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:04	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:04	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 21:04	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:04	591-78-6	
Methylene Chloride	**5.4**	ug/m3	5.3	1.49		11/03/19 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:04	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 21:04	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 21:04	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:04	67-63-0	
Propylene	**<0.52**	ug/m3	0.52	1.49		11/03/19 21:04	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 21:04	79-34-5	
Tetrachloroethene	**132**	ug/m3	1.0	1.49		11/03/19 21:04	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-5 **Lab ID: 70109447005** Collected: 10/22/19 15:47 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 21:04	109-99-9	
Toluene	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 21:04	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:04	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 21:04	79-00-5	
Trichloroethene	**<0.81**	ug/m3	0.81	1.49		11/03/19 21:04	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:04	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 21:04	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:04	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:04	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:04	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 21:04	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:04	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:04	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-6 **Lab ID: 70109447006** Collected: 10/22/19 16:00 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**15.4**	ug/m3	3.6	1.49		11/03/19 21:33	67-64-1	
Benzene	**1.8**	ug/m3	0.48	1.49		11/03/19 21:33	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 21:33	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 21:33	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 21:33	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 21:33	106-99-0	
2-Butanone (MEK)	**24.1**	ug/m3	4.5	1.49		11/03/19 21:33	78-93-3	
Carbon disulfide	**13.6**	ug/m3	0.94	1.49		11/03/19 21:33	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 21:33	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 21:33	75-00-3	
Chloroform	**<0.74**	ug/m3	0.74	1.49		11/03/19 21:33	67-66-3	
Chloromethane	**0.70**	ug/m3	0.63	1.49		11/03/19 21:33	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:33	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 21:33	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 21:33	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.49		11/03/19 21:33	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 21:33	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 21:33	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 21:33	76-14-2	
Ethanol	**<2.9**	ug/m3	2.9	1.49		11/03/19 21:33	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:33	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:33	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 21:33	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 21:33	87-68-3	
n-Hexane	**1.3**	ug/m3	1.1	1.49		11/03/19 21:33	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:33	591-78-6	
Methylene Chloride	**<5.3**	ug/m3	5.3	1.49		11/03/19 21:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 21:33	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 21:33	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 21:33	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 21:33	67-63-0	
Propylene	**6.2**	ug/m3	0.52	1.49		11/03/19 21:33	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 21:33	79-34-5	
Tetrachloroethene	**22.7**	ug/m3	1.0	1.49		11/03/19 21:33	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: PPB-6 **Lab ID: 70109447006** Collected: 10/22/19 16:00 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 21:33	109-99-9	
Toluene	**1.7**	ug/m3	1.1	1.49		11/03/19 21:33	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 21:33	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:33	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 21:33	79-00-5	
Trichloroethene	**<0.81**	ug/m3	0.81	1.49		11/03/19 21:33	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 21:33	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 21:33	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:33	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 21:33	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 21:33	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 21:33	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 21:33	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 21:33	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: INFLUENT PORT **Lab ID: 70109447007** Collected: 10/22/19 17:25 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.3**	ug/m3	3.3	1.39		11/03/19 22:02	67-64-1	
Benzene	**<0.45**	ug/m3	0.45	1.39		11/03/19 22:02	71-43-2	
Benzyl chloride	**<3.7**	ug/m3	3.7	1.39		11/03/19 22:02	100-44-7	
Bromodichloromethane	**<1.9**	ug/m3	1.9	1.39		11/03/19 22:02	75-27-4	
Bromoform	**<7.3**	ug/m3	7.3	1.39		11/03/19 22:02	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	74-83-9	
1,3-Butadiene	**<0.63**	ug/m3	0.63	1.39		11/03/19 22:02	106-99-0	
2-Butanone (MEK)	**10.4**	ug/m3	4.2	1.39		11/03/19 22:02	78-93-3	
Carbon disulfide	**<0.88**	ug/m3	0.88	1.39		11/03/19 22:02	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.39		11/03/19 22:02	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	108-90-7	
Chloroethane	**<0.75**	ug/m3	0.75	1.39		11/03/19 22:02	75-00-3	
Chloroform	**0.78**	ug/m3	0.69	1.39		11/03/19 22:02	67-66-3	
Chloromethane	**<0.58**	ug/m3	0.58	1.39		11/03/19 22:02	74-87-3	
Cyclohexane	**<2.4**	ug/m3	2.4	1.39		11/03/19 22:02	110-82-7	
Dibromochloromethane	**<2.4**	ug/m3	2.4	1.39		11/03/19 22:02	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	106-93-4	
1,2-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 22:02	95-50-1	
1,3-Dichlorobenzene	**<1.7**	ug/m3	1.7	1.39		11/03/19 22:02	541-73-1	
1,4-Dichlorobenzene	**<4.3**	ug/m3	4.3	1.39		11/03/19 22:02	106-46-7	
Dichlorodifluoromethane	**2.8**	ug/m3	1.4	1.39		11/03/19 22:02	75-71-8	
1,1-Dichloroethane	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	75-34-3	
1,2-Dichloroethane	**<0.57**	ug/m3	0.57	1.39		11/03/19 22:02	107-06-2	
1,1-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	75-35-4	
cis-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/m3	1.1	1.39		11/03/19 22:02	156-60-5	
1,2-Dichloropropane	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.39		11/03/19 22:02	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.39		11/03/19 22:02	76-14-2	
Ethanol	**4.0**	ug/m3	2.7	1.39		11/03/19 22:02	64-17-5	
Ethyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	141-78-6	
Ethylbenzene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	100-41-4	
4-Ethyltoluene	**<3.5**	ug/m3	3.5	1.39		11/03/19 22:02	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	142-82-5	
Hexachloro-1,3-butadiene	**<7.5**	ug/m3	7.5	1.39		11/03/19 22:02	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	110-54-3	
2-Hexanone	**<5.8**	ug/m3	5.8	1.39		11/03/19 22:02	591-78-6	
Methylene Chloride	**<4.9**	ug/m3	4.9	1.39		11/03/19 22:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<5.8**	ug/m3	5.8	1.39		11/03/19 22:02	108-10-1	
Methyl-tert-butyl ether	**<5.1**	ug/m3	5.1	1.39		11/03/19 22:02	1634-04-4	
Naphthalene	**<3.7**	ug/m3	3.7	1.39		11/03/19 22:02	91-20-3	
2-Propanol	**<3.5**	ug/m3	3.5	1.39		11/03/19 22:02	67-63-0	
Propylene	**<0.49**	ug/m3	0.49	1.39		11/03/19 22:02	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	100-42-5	
1,1,2,2-Tetrachloroethane	**<0.97**	ug/m3	0.97	1.39		11/03/19 22:02	79-34-5	
Tetrachloroethene	**331**	ug/m3	19.2	27.8		11/04/19 19:30	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: INFLUENT PORT **Lab ID: 70109447007** Collected: 10/22/19 17:25 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.83**	ug/m3	0.83	1.39		11/03/19 22:02	109-99-9	
Toluene	**1.2**	ug/m3	1.1	1.39		11/03/19 22:02	108-88-3	
1,2,4-Trichlorobenzene	**<10.5**	ug/m3	10.5	1.39		11/03/19 22:02	120-82-1	
1,1,1-Trichloroethane	**<1.5**	ug/m3	1.5	1.39		11/03/19 22:02	71-55-6	
1,1,2-Trichloroethane	**<0.77**	ug/m3	0.77	1.39		11/03/19 22:02	79-00-5	
Trichloroethene	**24.8**	ug/m3	0.76	1.39		11/03/19 22:02	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.39		11/03/19 22:02	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.39		11/03/19 22:02	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 22:02	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.39		11/03/19 22:02	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.39		11/03/19 22:02	108-05-4	
Vinyl chloride	**<0.36**	ug/m3	0.36	1.39		11/03/19 22:02	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.39		11/03/19 22:02	179601-23-1	
o-Xylene	**<1.2**	ug/m3	1.2	1.39		11/03/19 22:02	95-47-6	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: EFFLUENT PORT **Lab ID: 70109447008** Collected: 10/22/19 17:05 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**51.7**	ug/m3	3.7	1.55		11/03/19 22:31	67-64-1	
Benzene	**0.58**	ug/m3	0.50	1.55		11/03/19 22:31	71-43-2	
Benzyl chloride	**<4.1**	ug/m3	4.1	1.55		11/03/19 22:31	100-44-7	
Bromodichloromethane	**<2.1**	ug/m3	2.1	1.55		11/03/19 22:31	75-27-4	
Bromoform	**<8.1**	ug/m3	8.1	1.55		11/03/19 22:31	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	74-83-9	
1,3-Butadiene	**<0.70**	ug/m3	0.70	1.55		11/03/19 22:31	106-99-0	
2-Butanone (MEK)	**<4.6**	ug/m3	4.6	1.55		11/03/19 22:31	78-93-3	
Carbon disulfide	**<0.98**	ug/m3	0.98	1.55		11/03/19 22:31	75-15-0	
Carbon tetrachloride	**<2.0**	ug/m3	2.0	1.55		11/03/19 22:31	56-23-5	
Chlorobenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	108-90-7	
Chloroethane	**<0.83**	ug/m3	0.83	1.55		11/03/19 22:31	75-00-3	
Chloroform	**1.3**	ug/m3	0.77	1.55		11/03/19 22:31	67-66-3	
Chloromethane	**<0.65**	ug/m3	0.65	1.55		11/03/19 22:31	74-87-3	
Cyclohexane	**<2.7**	ug/m3	2.7	1.55		11/03/19 22:31	110-82-7	
Dibromochloromethane	**<2.7**	ug/m3	2.7	1.55		11/03/19 22:31	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	106-93-4	
1,2-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 22:31	95-50-1	
1,3-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 22:31	541-73-1	
1,4-Dichlorobenzene	**<4.7**	ug/m3	4.7	1.55		11/03/19 22:31	106-46-7	
Dichlorodifluoromethane	**3.1**	ug/m3	1.6	1.55		11/03/19 22:31	75-71-8	
1,1-Dichloroethane	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	75-34-3	
1,2-Dichloroethane	**<0.64**	ug/m3	0.64	1.55		11/03/19 22:31	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 22:31	156-59-2	
trans-1,2-Dichloroethene	**9.9**	ug/m3	1.2	1.55		11/03/19 22:31	156-60-5	
1,2-Dichloropropane	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	10061-02-6	
Dichlorotetrafluoroethane	**<2.2**	ug/m3	2.2	1.55		11/03/19 22:31	76-14-2	
Ethanol	**6.3**	ug/m3	3.0	1.55		11/03/19 22:31	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	141-78-6	
Ethylbenzene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	100-41-4	
4-Ethyltoluene	**<3.9**	ug/m3	3.9	1.55		11/03/19 22:31	622-96-8	
n-Heptane	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	142-82-5	
Hexachloro-1,3-butadiene	**<8.4**	ug/m3	8.4	1.55		11/03/19 22:31	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	110-54-3	
2-Hexanone	**<6.4**	ug/m3	6.4	1.55		11/03/19 22:31	591-78-6	
Methylene Chloride	**<5.5**	ug/m3	5.5	1.55		11/03/19 22:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.4**	ug/m3	6.4	1.55		11/03/19 22:31	108-10-1	
Methyl-tert-butyl ether	**<5.7**	ug/m3	5.7	1.55		11/03/19 22:31	1634-04-4	
Naphthalene	**<4.1**	ug/m3	4.1	1.55		11/03/19 22:31	91-20-3	
2-Propanol	**<3.9**	ug/m3	3.9	1.55		11/03/19 22:31	67-63-0	
Propylene	**<0.54**	ug/m3	0.54	1.55		11/03/19 22:31	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.55		11/03/19 22:31	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	79-34-5	
Tetrachloroethene	**4.1**	ug/m3	1.1	1.55		11/03/19 22:31	127-18-4	

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(612)607-1700

ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: EFFLUENT PORT **Lab ID: 70109447008** Collected: 10/22/19 17:05 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.93**	ug/m3	0.93	1.55		11/03/19 22:31	109-99-9	
Toluene	**6.5**	ug/m3	1.2	1.55		11/03/19 22:31	108-88-3	
1,2,4-Trichlorobenzene	**<11.7**	ug/m3	11.7	1.55		11/03/19 22:31	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.55		11/03/19 22:31	71-55-6	
1,1,2-Trichloroethane	**<0.86**	ug/m3	0.86	1.55		11/03/19 22:31	79-00-5	
Trichloroethene	**<0.85**	ug/m3	0.85	1.55		11/03/19 22:31	79-01-6	
Trichlorofluoromethane	**1.8**	ug/m3	1.8	1.55		11/03/19 22:31	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.4**	ug/m3	2.4	1.55		11/03/19 22:31	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 22:31	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 22:31	108-05-4	
Vinyl chloride	**<0.40**	ug/m3	0.40	1.55		11/03/19 22:31	75-01-4	
m&p-Xylene	**3.3**	ug/m3	2.7	1.55		11/03/19 22:31	179601-23-1	
o-Xylene	**<1.4**	ug/m3	1.4	1.55		11/03/19 22:31	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: INDOOR AMBIENT AIR **Lab ID: 70109447009** Collected: 10/22/19 16:45 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**13.2**	ug/m3	3.6	1.49		11/03/19 23:00	67-64-1	
Benzene	**<0.48**	ug/m3	0.48	1.49		11/03/19 23:00	71-43-2	
Benzyl chloride	**<3.9**	ug/m3	3.9	1.49		11/03/19 23:00	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.49		11/03/19 23:00	75-27-4	
Bromoform	**<7.8**	ug/m3	7.8	1.49		11/03/19 23:00	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	74-83-9	
1,3-Butadiene	**<0.67**	ug/m3	0.67	1.49		11/03/19 23:00	106-99-0	
2-Butanone (MEK)	**<4.5**	ug/m3	4.5	1.49		11/03/19 23:00	78-93-3	
Carbon disulfide	**2.2**	ug/m3	0.94	1.49		11/03/19 23:00	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.49		11/03/19 23:00	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	108-90-7	
Chloroethane	**<0.80**	ug/m3	0.80	1.49		11/03/19 23:00	75-00-3	
Chloroform	**<0.74**	ug/m3	0.74	1.49		11/03/19 23:00	67-66-3	
Chloromethane	**0.83**	ug/m3	0.63	1.49		11/03/19 23:00	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	110-82-7	
Dibromochloromethane	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 23:00	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.49		11/03/19 23:00	541-73-1	
1,4-Dichlorobenzene	**<4.6**	ug/m3	4.6	1.49		11/03/19 23:00	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.49		11/03/19 23:00	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	75-34-3	
1,2-Dichloroethane	**<0.61**	ug/m3	0.61	1.49		11/03/19 23:00	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.49		11/03/19 23:00	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.49		11/03/19 23:00	76-14-2	
Ethanol	**19.0**	ug/m3	2.9	1.49		11/03/19 23:00	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	100-41-4	
4-Ethyltoluene	**<3.7**	ug/m3	3.7	1.49		11/03/19 23:00	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.49		11/03/19 23:00	142-82-5	
Hexachloro-1,3-butadiene	**<8.1**	ug/m3	8.1	1.49		11/03/19 23:00	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	110-54-3	
2-Hexanone	**<6.2**	ug/m3	6.2	1.49		11/03/19 23:00	591-78-6	
Methylene Chloride	**10.7**	ug/m3	5.3	1.49		11/03/19 23:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.2**	ug/m3	6.2	1.49		11/03/19 23:00	108-10-1	
Methyl-tert-butyl ether	**<5.5**	ug/m3	5.5	1.49		11/03/19 23:00	1634-04-4	
Naphthalene	**<4.0**	ug/m3	4.0	1.49		11/03/19 23:00	91-20-3	
2-Propanol	**<3.7**	ug/m3	3.7	1.49		11/03/19 23:00	67-63-0	
Propylene	**<0.52**	ug/m3	0.52	1.49		11/03/19 23:00	115-07-1	
Styrene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.49		11/03/19 23:00	79-34-5	
Tetrachloroethene	**263**	ug/m3	1.0	1.49		11/03/19 23:00	127-18-4	

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(612)607-1700

ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: INDOOR AMBIENT AIR **Lab ID: 70109447009** Collected: 10/22/19 16:45 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.89**	ug/m3	0.89	1.49		11/03/19 23:00	109-99-9	
Toluene	**2.0**	ug/m3	1.1	1.49		11/03/19 23:00	108-88-3	
1,2,4-Trichlorobenzene	**<11.2**	ug/m3	11.2	1.49		11/03/19 23:00	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 23:00	71-55-6	
1,1,2-Trichloroethane	**<0.83**	ug/m3	0.83	1.49		11/03/19 23:00	79-00-5	
Trichloroethene	**46.6**	ug/m3	0.81	1.49		11/03/19 23:00	79-01-6	
Trichlorofluoromethane	**<1.7**	ug/m3	1.7	1.49		11/03/19 23:00	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.49		11/03/19 23:00	76-13-1	
1,2,4-Trimethylbenzene	**1.9**	ug/m3	1.5	1.49		11/03/19 23:00	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.49		11/03/19 23:00	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.49		11/03/19 23:00	108-05-4	
Vinyl chloride	**<0.39**	ug/m3	0.39	1.49		11/03/19 23:00	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.49		11/03/19 23:00	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.49		11/03/19 23:00	95-47-6	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: OUTDOOR AMBIENT AIR **Lab ID: 70109447010** Collected: 10/22/19 16:55 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**8.6**	ug/m3	3.5	1.44		11/03/19 23:29	67-64-1	
Benzene	**0.48**	ug/m3	0.47	1.44		11/03/19 23:29	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.44		11/03/19 23:29	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 23:29	75-27-4	
Bromoform	**<7.6**	ug/m3	7.6	1.44		11/03/19 23:29	75-25-2	
Bromomethane	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	74-83-9	
1,3-Butadiene	**<0.65**	ug/m3	0.65	1.44		11/03/19 23:29	106-99-0	
2-Butanone (MEK)	**<4.3**	ug/m3	4.3	1.44		11/03/19 23:29	78-93-3	
Carbon disulfide	**<0.91**	ug/m3	0.91	1.44		11/03/19 23:29	75-15-0	
Carbon tetrachloride	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	56-23-5	
Chlorobenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	108-90-7	
Chloroethane	**<0.77**	ug/m3	0.77	1.44		11/03/19 23:29	75-00-3	
Chloroform	**<0.71**	ug/m3	0.71	1.44		11/03/19 23:29	67-66-3	
Chloromethane	**0.61**	ug/m3	0.60	1.44		11/03/19 23:29	74-87-3	
Cyclohexane	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.44		11/03/19 23:29	541-73-1	
1,4-Dichlorobenzene	**<4.4**	ug/m3	4.4	1.44		11/03/19 23:29	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.5	1.44		11/03/19 23:29	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	75-34-3	
1,2-Dichloroethane	**<0.59**	ug/m3	0.59	1.44		11/03/19 23:29	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	10061-02-6	
Dichlorotetrafluoroethane	**<2.0**	ug/m3	2.0	1.44		11/03/19 23:29	76-14-2	
Ethanol	**3.4**	ug/m3	2.8	1.44		11/03/19 23:29	64-17-5	
Ethyl acetate	**<1.1**	ug/m3	1.1	1.44		11/03/19 23:29	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.44		11/03/19 23:29	622-96-8	
n-Heptane	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	142-82-5	
Hexachloro-1,3-butadiene	**<7.8**	ug/m3	7.8	1.44		11/03/19 23:29	87-68-3	
n-Hexane	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	110-54-3	
2-Hexanone	**<6.0**	ug/m3	6.0	1.44		11/03/19 23:29	591-78-6	
Methylene Chloride	**<5.1**	ug/m3	5.1	1.44		11/03/19 23:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.0**	ug/m3	6.0	1.44		11/03/19 23:29	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.44		11/03/19 23:29	1634-04-4	
Naphthalene	**<3.8**	ug/m3	3.8	1.44		11/03/19 23:29	91-20-3	
2-Propanol	**<3.6**	ug/m3	3.6	1.44		11/03/19 23:29	67-63-0	
Propylene	**<0.50**	ug/m3	0.50	1.44		11/03/19 23:29	115-07-1	
Styrene	**<1.2**	ug/m3	1.2	1.44		11/03/19 23:29	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	79-34-5	
Tetrachloroethene	**69.7**	ug/m3	0.99	1.44		11/03/19 23:29	127-18-4	

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ANALYTICAL RESULTS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Sample: OUTDOOR AMBIENT AIR **Lab ID: 70109447010** Collected: 10/22/19 16:55 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrahydrofuran	**<0.86**	ug/m3	0.86	1.44		11/03/19 23:29	109-99-9	
Toluene	**1.5**	ug/m3	1.1	1.44		11/03/19 23:29	108-88-3	
1,2,4-Trichlorobenzene	**<10.9**	ug/m3	10.9	1.44		11/03/19 23:29	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 23:29	71-55-6	
1,1,2-Trichloroethane	**<0.80**	ug/m3	0.80	1.44		11/03/19 23:29	79-00-5	
Trichloroethene	**<0.79**	ug/m3	0.79	1.44		11/03/19 23:29	79-01-6	
Trichlorofluoromethane	**<1.6**	ug/m3	1.6	1.44		11/03/19 23:29	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.2**	ug/m3	2.2	1.44		11/03/19 23:29	76-13-1	
1,2,4-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	95-63-6	
1,3,5-Trimethylbenzene	**<1.4**	ug/m3	1.4	1.44		11/03/19 23:29	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.44		11/03/19 23:29	108-05-4	
Vinyl chloride	**<0.37**	ug/m3	0.37	1.44		11/03/19 23:29	75-01-4	
m&p-Xylene	**<2.5**	ug/m3	2.5	1.44		11/03/19 23:29	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.44		11/03/19 23:29	95-47-6	

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QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

QC Batch: 642603 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.56	0.56	11/03/19 10:03	
1,1,2,2-Tetrachloroethane	ug/m3	<0.35	0.35	11/03/19 10:03	
1,1,2-Trichloroethane	ug/m3	<0.28	0.28	11/03/19 10:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.78	0.78	11/03/19 10:03	
1,1-Dichloroethane	ug/m3	<0.41	0.41	11/03/19 10:03	
1,1-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
1,2,4-Trichlorobenzene	ug/m3	<3.8	3.8	11/03/19 10:03	
1,2,4-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,2-Dibromoethane (EDB)	ug/m3	<0.39	0.39	11/03/19 10:03	
1,2-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,2-Dichloroethane	ug/m3	<0.21	0.21	11/03/19 10:03	
1,2-Dichloropropane	ug/m3	<0.47	0.47	11/03/19 10:03	
1,3,5-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,3-Butadiene	ug/m3	<0.22	0.22	11/03/19 10:03	
1,3-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,4-Dichlorobenzene	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Butanone (MEK)	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Hexanone	ug/m3	<2.1	2.1	11/03/19 10:03	
2-Propanol	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Ethyltoluene	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	<2.1	2.1	11/03/19 10:03	
Acetone	ug/m3	<1.2	1.2	11/03/19 10:03	
Benzene	ug/m3	<0.16	0.16	11/03/19 10:03	
Benzyl chloride	ug/m3	<1.3	1.3	11/03/19 10:03	
Bromodichloromethane	ug/m3	<0.68	0.68	11/03/19 10:03	
Bromoform	ug/m3	<2.6	2.6	11/03/19 10:03	
Bromomethane	ug/m3	<0.39	0.39	11/03/19 10:03	
Carbon disulfide	ug/m3	<0.32	0.32	11/03/19 10:03	
Carbon tetrachloride	ug/m3	<0.64	0.64	11/03/19 10:03	
Chlorobenzene	ug/m3	<0.47	0.47	11/03/19 10:03	
Chloroethane	ug/m3	<0.27	0.27	11/03/19 10:03	
Chloroform	ug/m3	<0.25	0.25	11/03/19 10:03	
Chloromethane	ug/m3	<0.21	0.21	11/03/19 10:03	
cis-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
cis-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Cyclohexane	ug/m3	<0.88	0.88	11/03/19 10:03	
Dibromochloromethane	ug/m3	<0.86	0.86	11/03/19 10:03	
Dichlorodifluoromethane	ug/m3	<0.50	0.50	11/03/19 10:03	
Dichlorotetrafluoroethane	ug/m3	<0.71	0.71	11/03/19 10:03	
Ethanol	ug/m3	<0.96	0.96	11/03/19 10:03	

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QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

METHOD BLANK: 3460707 Matrix: Air

Associated Lab Samples: 70109447001, 70109447002, 70109447003, 70109447004, 70109447005, 70109447006, 70109447007, 70109447008, 70109447009, 70109447010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethyl acetate	ug/m3	<0.37	0.37	11/03/19 10:03	
Ethylbenzene	ug/m3	<0.44	0.44	11/03/19 10:03	
Hexachloro-1,3-butadiene	ug/m3	<2.7	2.7	11/03/19 10:03	
m&p-Xylene	ug/m3	<0.88	0.88	11/03/19 10:03	
Methyl-tert-butyl ether	ug/m3	<1.8	1.8	11/03/19 10:03	
Methylene Chloride	ug/m3	<1.8	1.8	11/03/19 10:03	
n-Heptane	ug/m3	<0.42	0.42	11/03/19 10:03	
n-Hexane	ug/m3	<0.36	0.36	11/03/19 10:03	
Naphthalene	ug/m3	<1.3	1.3	11/03/19 10:03	
o-Xylene	ug/m3	<0.44	0.44	11/03/19 10:03	
Propylene	ug/m3	<0.18	0.18	11/03/19 10:03	
Styrene	ug/m3	<0.43	0.43	11/03/19 10:03	
Tetrachloroethene	ug/m3	<0.34	0.34	11/03/19 10:03	
Tetrahydrofuran	ug/m3	<0.30	0.30	11/03/19 10:03	
Toluene	ug/m3	<0.38	0.38	11/03/19 10:03	
trans-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
trans-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Trichloroethene	ug/m3	<0.27	0.27	11/03/19 10:03	
Trichlorofluoromethane	ug/m3	<0.57	0.57	11/03/19 10:03	
Vinyl acetate	ug/m3	<0.36	0.36	11/03/19 10:03	
Vinyl chloride	ug/m3	<0.13	0.13	11/03/19 10:03	

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	58.6	106	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	68.8	99	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	60.8	110	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	86.1	111	70-130	
1,1-Dichloroethane	ug/m3	41.1	41.7	101	70-130	
1,1-Dichloroethene	ug/m3	40.3	44.2	110	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	91.1	121	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	54.2	109	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	85.8	110	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	69.3	113	70-132	
1,2-Dichloroethane	ug/m3	41.1	42.5	103	70-130	
1,2-Dichloropropane	ug/m3	47	49.9	106	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	56.1	112	70-132	
1,3-Butadiene	ug/m3	22.5	26.6	118	65-130	
1,3-Dichlorobenzene	ug/m3	61.1	69.0	113	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	69.8	114	70-134	
2-Butanone (MEK)	ug/m3	30	32.6	109	70-130	
2-Hexanone	ug/m3	41.6	39.1	94	70-135	

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QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Propanol	ug/m3	125	130	104	68-130	
4-Ethyltoluene	ug/m3	50	55.0	110	70-138	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	40.5	97	70-131	
Acetone	ug/m3	121	125	103	67-130	
Benzene	ug/m3	32.5	33.1	102	70-130	
Benzyl chloride	ug/m3	52.6	50.4	96	70-130	
Bromodichloromethane	ug/m3	68.1	70.0	103	70-130	
Bromoform	ug/m3	105	116	110	70-132	
Bromomethane	ug/m3	39.5	46.0	117	69-130	
Carbon disulfide	ug/m3	31.6	36.1	114	56-137	
Carbon tetrachloride	ug/m3	64	65.0	102	66-131	
Chlorobenzene	ug/m3	46.8	50.2	107	70-130	
Chloroethane	ug/m3	26.8	32.6	122	70-130	
Chloroform	ug/m3	49.6	49.7	100	70-130	
Chloromethane	ug/m3	21	22.2	106	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	46.3	115	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	47.7	103	70-133	
Cyclohexane	ug/m3	35	37.7	108	68-132	
Dibromochloromethane	ug/m3	86.6	97.0	112	70-130	
Dichlorodifluoromethane	ug/m3	50.3	50.0	99	70-130	
Dichlorotetrafluoroethane	ug/m3	71	76.5	108	70-130	
Ethanol	ug/m3	95.8	99.6	104	68-133	
Ethyl acetate	ug/m3	36.6	36.8	100	69-130	
Ethylbenzene	ug/m3	44.1	47.4	107	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	142	131	66-137	CH
m&p-Xylene	ug/m3	88.3	96.7	110	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	43.6	119	70-130	
Methylene Chloride	ug/m3	177	173	98	65-130	
n-Heptane	ug/m3	41.7	43.4	104	65-130	
n-Hexane	ug/m3	35.8	35.1	98	66-130	
Naphthalene	ug/m3	53.3	48.3	91	56-130	
o-Xylene	ug/m3	44.1	47.7	108	70-130	
Propylene	ug/m3	17.5	17.5	100	67-130	
Styrene	ug/m3	43.3	46.7	108	69-136	
Tetrachloroethene	ug/m3	68.9	84.4	122	70-130	
Tetrahydrofuran	ug/m3	30	31.8	106	68-131	
Toluene	ug/m3	38.3	41.1	107	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	46.0	114	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	47.6	103	70-134	
Trichloroethene	ug/m3	54.6	66.0	121	70-130	
Trichlorofluoromethane	ug/m3	57.1	61.8	108	65-130	
Vinyl acetate	ug/m3	35.8	40.6	114	61-133	
Vinyl chloride	ug/m3	26	31.4	121	70-130	

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QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.5		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.94		
1,1,2-Trichloroethane	ug/m3	ND	<0.74		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.1		
1,1-Dichloroethane	ug/m3	ND	<1.1		
1,1-Dichloroethene	ug/m3	ND	<1.1		
1,2,4-Trichlorobenzene	ug/m3	ND	<10.1		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.3		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.0		
1,2-Dichlorobenzene	ug/m3	ND	<1.6		
1,2-Dichloroethane	ug/m3	ND	<0.55		
1,2-Dichloropropane	ug/m3	ND	<1.3		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.3		
1,3-Butadiene	ug/m3	ND	<0.60		
1,3-Dichlorobenzene	ug/m3	ND	<1.6		
1,4-Dichlorobenzene	ug/m3	ND	<4.1		
2-Butanone (MEK)	ug/m3	ND	<4.0		
2-Hexanone	ug/m3	ND	<5.6		
2-Propanol	ug/m3	ND	<3.4		
4-Ethyltoluene	ug/m3	ND	<3.4		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<5.6		
Acetone	ug/m3	5.2	5.1	2	
Benzene	ug/m3	0.47	0.44	6	
Benzyl chloride	ug/m3	ND	<3.5		
Bromodichloromethane	ug/m3	ND	<1.8		
Bromoform	ug/m3	ND	<7.0		
Bromomethane	ug/m3	ND	<1.1		
Carbon disulfide	ug/m3	ND	<0.85		
Carbon tetrachloride	ug/m3	ND	<1.7		
Chlorobenzene	ug/m3	ND	<1.3		
Chloroethane	ug/m3	ND	<0.72		
Chloroform	ug/m3	ND	<0.66		
Chloromethane	ug/m3	0.70	0.67	4	
cis-1,2-Dichloroethene	ug/m3	ND	<1.1		
cis-1,3-Dichloropropene	ug/m3	ND	<1.2		
Cyclohexane	ug/m3	ND	<2.3		
Dibromochloromethane	ug/m3	ND	<2.3		
Dichlorodifluoromethane	ug/m3	2.3	2.3	2	
Dichlorotetrafluoroethane	ug/m3	ND	<1.9		
Ethanol	ug/m3	ND	<2.6		
Ethyl acetate	ug/m3	ND	<0.98		
Ethylbenzene	ug/m3	ND	<1.2		
Hexachloro-1,3-butadiene	ug/m3	ND	<7.3		
m&p-Xylene	ug/m3	ND	<2.4		
Methyl-tert-butyl ether	ug/m3	ND	<4.9		
Methylene Chloride	ug/m3	ND	<4.7		
n-Heptane	ug/m3	ND	<1.1		

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QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
n-Hexane	ug/m3	ND	<0.96		
Naphthalene	ug/m3	ND	<3.6		
o-Xylene	ug/m3	ND	<1.2		
Propylene	ug/m3	ND	<0.47		
Styrene	ug/m3	ND	<1.2		
Tetrachloroethene	ug/m3	ND	<0.92		
Tetrahydrofuran	ug/m3	ND	<0.80		
Toluene	ug/m3	1.3	1.2	8	
trans-1,2-Dichloroethene	ug/m3	ND	<1.1		
trans-1,3-Dichloropropene	ug/m3	ND	<1.2		
Trichloroethene	ug/m3	ND	<0.73		
Trichlorofluoromethane	ug/m3	ND	<1.5		
Vinyl acetate	ug/m3	ND	<0.96		
Vinyl chloride	ug/m3	ND	<0.35		

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.8		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<1.1		
1,1,2-Trichloroethane	ug/m3	ND	<0.88		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.5		
1,1-Dichloroethane	ug/m3	ND	<1.3		
1,1-Dichloroethene	ug/m3	ND	<1.3		
1,2,4-Trichlorobenzene	ug/m3	ND	<11.9		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.6		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.2		
1,2-Dichlorobenzene	ug/m3	ND	<1.9		
1,2-Dichloroethane	ug/m3	ND	<0.65		
1,2-Dichloropropane	ug/m3	ND	<1.5		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.6		
1,3-Butadiene	ug/m3	ND	<0.71		
1,3-Dichlorobenzene	ug/m3	ND	<1.9		
1,4-Dichlorobenzene	ug/m3	ND	<4.8		
2-Butanone (MEK)	ug/m3	ND	<4.7		
2-Hexanone	ug/m3	ND	<6.6		
2-Propanol	ug/m3	ND	<4.0		
4-Ethyltoluene	ug/m3	ND	<4.0		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<6.6		
Acetone	ug/m3	15.7	15.8	1	
Benzene	ug/m3	1.5	1.5	1	
Benzyl chloride	ug/m3	ND	<4.2		
Bromodichloromethane	ug/m3	ND	<2.1		
Bromoform	ug/m3	ND	<8.3		
Bromomethane	ug/m3	ND	<1.2		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
Carbon disulfide	ug/m3	ND	<1.0		
Carbon tetrachloride	ug/m3	ND	<2.0		
Chlorobenzene	ug/m3	ND	<1.5		
Chloroethane	ug/m3	ND	<0.85		
Chloroform	ug/m3	ND	<0.78		
Chloromethane	ug/m3	ND	0.81		
cis-1,2-Dichloroethene	ug/m3	ND	<1.3		
cis-1,3-Dichloropropene	ug/m3	ND	<1.5		
Cyclohexane	ug/m3	ND	<2.8		
Dibromochloromethane	ug/m3	ND	<2.7		
Dichlorodifluoromethane	ug/m3	2.4	2.4	2	
Dichlorotetrafluoroethane	ug/m3	ND	<2.2		
Ethanol	ug/m3	ND	<3.0		
Ethyl acetate	ug/m3	ND	<1.2		
Ethylbenzene	ug/m3	ND	<1.4		
Hexachloro-1,3-butadiene	ug/m3	ND	<8.6		
m&p-Xylene	ug/m3	ND	<2.8		
Methyl-tert-butyl ether	ug/m3	ND	<5.8		
Methylene Chloride	ug/m3	5.7	5.8	2	
n-Heptane	ug/m3	ND	<1.3		
n-Hexane	ug/m3	ND	<1.1		
Naphthalene	ug/m3	ND	<4.2		
o-Xylene	ug/m3	ND	<1.4		
Propylene	ug/m3	ND	<0.55		
Styrene	ug/m3	ND	<1.4		
Tetrachloroethene	ug/m3	ND	<1.1		
Tetrahydrofuran	ug/m3	ND	<0.95		
Toluene	ug/m3	1.5	1.5	1	
trans-1,2-Dichloroethene	ug/m3	ND	<1.3		
trans-1,3-Dichloropropene	ug/m3	ND	<1.5		
Trichloroethene	ug/m3	ND	<0.86		
Trichlorofluoromethane	ug/m3	ND	<1.8		
Vinyl acetate	ug/m3	ND	<1.1		
Vinyl chloride	ug/m3	ND	<0.41		

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 70109447 Cashin Associates
Pace Project No.: 10496798

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70109447001	**PPB-1**	TO-15	642603		
70109447002	**PP-2**	TO-15	642603		
70109447003	**PP-3**	TO-15	642603		
70109447004	**PP-4**	TO-15	642603		
70109447005	**PPB-5**	TO-15	642603		
70109447006	**PPB-6**	TO-15	642603		
70109447007	**INFLUENT PORT**	TO-15	642603		
70109447008	**EFFLUENT PORT**	TO-15	642603		
70109447009	**INDOOR AMBIENT AIR**	TO-15	642603		
70109447010	**OUTDOOR AMBIENT AIR**	TO-15	642603		

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Chain of Custody

WO# : 10496798

10496798

☐ Samples were sent directly to the Subcontracting Laboratory.

State Of Origin: NY

Cert. Needed: ☐ Yes ☐ No

Workorder: 70109447 **Workorder Name:** BAYVILLE VILLAGE DRY CLEANERS **Owner Received Date:** 10/23/2019 **Results Requested By:** 11/6/2019

Report To	Subcontract To
Sophia Sparkes Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	Requested Analysis: TO-15 Full list VOCs	LAB USE ONLY
1	PPB-1	PS	10/22/2019 16:35	70109447001	Air	1	X	001
2	PP-2	PS	10/22/2019 17:00	70109447002	Air	1	X	002
3	PP-3	PS	10/22/2019 17:40	70109447003	Air	1	X	003
4	PP-4	PS	10/22/2019 16:25	70109447004	Air	1	X	004
5	PPB-5	PS	10/22/2019 15:47	70109447005	Air	1	X	005
6	PPB-6	PS	10/22/2019 16:00	70109447006	Air	1	X	006
7	INFLUENT PORT	PS	10/22/2019 17:25	70109447007	Air	1	X	007
8	EFFLUENT PORT	PS	10/22/2019 17:05	70109447008	Air	1	X	008
9	INDOOR AMBIENT AIR	PS	10/22/2019 16:45	70109447009	Air	1	X	009
10	OUTDOOR AMBIENT AIR	PS	10/22/2019 16:55	70109447010	Air	1	X	010

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	10/23/19 18:00	[signature] PACE	10/24/19 9:30
2				
3				

Comments

Cooler Temperature on Receipt ___ °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUST

The Chain-of-Custody is a LEGAL DOCUMENT

WO#: 70109447



1

Section A
Required Client Information:

Company: Cashin Associates
Address: 1200 Veterans Memorial Hwy
Hauppauge NY 11788
Email To: Mcalifano@ca-pc.com
Phone: 631-348-7600 Fax: 631-348-7601
Requested Due Date/TAT: STD

Section B
Required Project Information:

Report To: Cashin Associates
Copy To: Thomas Ryan
Marc Califano
Purchase Order No.:
Project Name: Bayville Village Dry Cleaners
Project Number: 13CTS.030T7

Section C
Invoice Information:

Attention: Thomas Ryan
Company Name: Bayville Cleaners
Address: 19 Todd Dr. Glen Head NY
Pace Quote Reference: 11545
Pace Project Manager/Sales Rep.
Pace Profile #: 38414

Program
UST Superfund Emissions Clean Air Act
Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: NY

Reporting Units
ug/m³ mg/m³
PPBV PPMV
Other

Report Level II III IV Other

Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: TO-14	Method: TO-15 Full List VOCs	Pace Lab ID
1	PPB-1	6LC		10-22-19	8:55	10-22-19	4:35	-30	-2	2099	1447	✓		001
2	PP-2	6LC		10-22-19	9:03	10-22-19	5:00	-30	-3	2798	0306	✓		002
3	PP-3	6LC		10-22-19	9:41	10-22-19	5:40	-29	-14	2319	1796	✓		003
4	PP-4	6LC		10-22-19	8:30	10-22-19	4:25	-30	-2	3555	0434	✓		004
5	PPB-5	6LC		10-22-19	8:35	10-22-19	3:47	-28	-2	2712	0088	✓		005
6	PPB-6	6LC		10-22-19	8:46	10-22-19	4:00	-29	-4	1211	2100	✓		006
7	Influent Port	6LC		10-22-19	9:20	10-22-19	5:25	-30	-4	946	1789	✓		007
8	Effluent Port	6LC		10-22-19	9:37	10-22-19	5:05	-30	-4	2022	0334	✓		008
9	Indoor Ambient Air	6LC		10-22-19	9:12	10-22-19	4:45	-30	-3	0558	1438	✓		009
10	Outdoor Ambient Air	6LC		10-22-19	9:07	10-22-19	4:55	-30	-2	2688	0078	✓		010
11														
12														

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Marc Califano CASHIN	10/23/19	12:50	Pace	10/23/19	12:51

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: MARC CALIFANO CASHIN
SIGNATURE of SAMPLER: Marc Califano
DATE Signed (MM / DD / YY): 10/23/19

SAMPLE CONDITIONS			
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	
Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N

ORIGINAL

Pace Analytical

Sample Condition Upon Receipt

WO#:70109447
PM: STS Due Date: 11/06/19
CLIENT: CAS-ECO

Client Name: CAS ECO

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziplog ☐ None ☐ Other Type of Ice: Wet Blue None

Thermometer Used: TH091 Correction Factor: +0.2 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): N/A Cooler Temperature Corrected (°C): N/A Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample) Date and Initials of person examining contents: JK 10/23/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested:	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix SL WT OIL (WT)	☑Yes	☐No		12.
All containers needing preservation have been checked pH paper Lot #	☐Yes	☐No	☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☑N/A	Sample #
				Initial when completed: / Lot # of added preservative: / Date/Time preservative added
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐Yes	☐No	☑N/A	14. Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 14Oct2019
	Document No.: F-MN-A-106-rev.19	Page 1 of 1
		Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt **Client Name:** PACE – NY **Project #:**

WO#: 10496798

PM: JMR **Due Date: 11/07/19**

CLIENT: PASI-LINY

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Pace [ ] SpeeDee [ ] Commercial **See Exception** [X]

Tracking Number: _____

Custody Seal on Cooler/Box Present? [ ] Yes [X] No **Seals Intact?** [ ] Yes [X] No

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [X] Foam [ ] None [ ] Tin Can [ ] Other:_____ **Temp Blank rec:** [ ] Yes [X] No

Temp. (TO17 and TO13 samples only) (°C): X **Corrected Temp (°C):** X **Thermometer Used:** [ ] G87A9170600254 [ ] G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** X **Date & Initials of Person Examining Contents:** 10/24/19 CMy

Type of ice Received [ ] Blue [ ] Wet [X] None

		Comments:
Chain of Custody Present?	[X] Yes [ ] No	1.
Chain of Custody Filled Out?	[X] Yes [ ] No	2.
Chain of Custody Relinquished?	[X] Yes [ ] No	3.
Sampler Name and/or Signature on COC?	[ ] Yes [ ] No [X] N/A	4.
Samples Arrived within Hold Time?	[X] Yes [ ] No	5.
Short Hold Time Analysis (<72 hr)?	[ ] Yes [X] No	6.
Rush Turn Around Time Requested?	[ ] Yes [X] No	7.
Sufficient Volume?	[X] Yes [ ] No	8.
Correct Containers Used?	[X] Yes [ ] No	9.
-Pace Containers Used?	[X] Yes [ ] No	
Containers Intact?	[X] Yes [ ] No	10.
Media: (Air Can) Airbag Filter TDT Passive		11. Individually Certified Cans Y (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	[X] Yes [ ] No	12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	[X] Yes [ ] No	13.

Gauge # [X] 10AIR26 [ ] 10AIR34 [ ] 10AIR35 [ ] 4097

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
PPB-1	2099	1447	-2	+5	INDOOR	0558	1438	-3	-5
PP-2	2798	0306	-1.5	+5	OUTDOOR	2688	0078	-2	+5
PP-3	2319	1796	-14	+5					
PP-4	3555	0434	-1	+5					
PPB-5	2712	0088	-3	+5					
PPB-6	1211	2100	-3	+5					
INF. PORT	0946	1789	-1	+5					
EFF. PORT	7022	0334	-4	+5					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** [ ] Yes [ ] No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Joanne Richardson **Date:** 11-5-19

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical®	Document Name: SCUR Exception Form – Coolers Above 6°C	Document Revised: 08Apr2019 Page 1 of 1
	Document No.: F-MN-C-298-Rev.02	Issuing Authority: Pace Minnesota Quality Office

During sample triage, this form is to be placed in each cooler that arrives above 6.0 degrees Celsius

SCUR Exceptions: **Workorder #:**10496798

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank

Read Temp	Corrected Temp	Average Temp

Tracking Number/Temperature	
1269 2021 1252	
1269 2021 1241	
1269 2021 1263	
10/24/19 CMY ~~124~~	
1269 2021 1274	

Other Issues

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447001
Client Sample ID: PPB-1

ProjSampleNum: 70109447001
Matrix: Air

Date Collected: 10/22/19 16:35
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.6	<1.6	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	79-34-5
1,1,2-Trichloroethane	0.8	<0.80	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.2	<2.2	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 19:08	MJL	75-35-4
1,2,4-Trichlorobenzene	10.9	<10.9	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	120-82-1
1,2,4-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	95-50-1
1,2-Dichloroethane	0.59	<0.59	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.44	11/03/19 19:08	MJL	78-87-5
1,3,5-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	108-67-8
1,3-Butadiene	0.65	<0.65	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	541-73-1
1,4-Dichlorobenzene	4.4	<4.4	0.00072	<0.00072	1.44	11/03/19 19:08	MJL	106-46-7
2-Butanone (MEK)	4.3	<4.3	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	78-93-3
2-Hexanone	6	<6.0	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	591-78-6
2-Propanol	3.6	<3.6	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	67-63-0
4-Ethyltoluene	3.6	<3.6	0.00072	<0.00072	1.44	11/03/19 19:08	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6	<6.0	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	108-10-1
Acetone	3.5	12.8	0.0014	0.0053	1.44	11/03/19 19:08	MJL	67-64-1
Benzene	0.47	<0.47	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	71-43-2
Benzyl chloride	3.8	<3.8	0.00072	<0.00072	1.44	11/03/19 19:08	MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	75-27-4
Bromoform	7.6	<7.6	0.00072	<0.00072	1.44	11/03/19 19:08	MJL	75-25-2
Bromomethane	1.1	<1.1	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	74-83-9
Carbon disulfide	0.91	<0.91	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	75-15-0
Carbon tetrachloride	1.8	<1.8	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	56-23-5
Chlorobenzene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	108-90-7
Chloroethane	0.77	<0.77	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	75-00-3
Chloroform	0.71	3.7	0.00014	0.00075	1.44	11/03/19 19:08	MJL	67-66-3
Chloromethane	0.6	<0.60	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 19:08	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	10061-01-5
Cyclohexane	2.5	<2.5	0.00071	<0.00071	1.44	11/03/19 19:08	MJL	110-82-7
Dibromochloromethane	2.5	<2.5	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	124-48-1
Dichlorodifluoromethane	1.5	3.6	0.0003	0.00072	1.44	11/03/19 19:08	MJL	75-71-8
Dichlorotetrafluoroethane	2	<2.0	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	76-14-2
Ethanol	2.8	<2.8	0.0015	<0.0015	1.44	11/03/19 19:08	MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.44	11/03/19 19:08	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	100-41-4
Hexachloro-1,3-butadiene	7.8	<7.8	0.00072	<0.00072	1.44	11/03/19 19:08	MJL	87-68-3
m&p-Xylene	2.5	<2.5	0.00057	<0.00057	1.44	11/03/19 19:08	MJL	179601-23-1
Methylene Chloride	5.1	<5.1	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	75-09-2
Methyl-tert-butyl ether	5.3	<5.3	0.0014	<0.0014	1.44	11/03/19 19:08	MJL	1634-04-4
Naphthalene	3.8	<3.8	0.00071	<0.00071	1.44	11/03/19 19:08	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	142-82-5
n-Hexane	1	<1.0	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	95-47-6
Propylene	0.5	<0.50	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	115-07-1
Styrene	1.2	<1.2	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	100-42-5
Tetrachloroethene	9.9	434	0.0014	0.063	14.4	11/04/19 18:34	MJL	127-18-4
Tetrahydrofuran	0.86	<0.86	0.00029	<0.00029	1.44	11/03/19 19:08	MJL	109-99-9
Toluene	1.1	1.2	0.00029	0.00031	1.44	11/03/19 19:08	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 19:08	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	10061-02-6
Trichloroethene	0.79	5.5	0.00014	0.001	1.44	11/03/19 19:08	MJL	79-01-6
Trichlorofluoromethane	1.6	<1.6	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.44	11/03/19 19:08	MJL	108-05-4
Vinyl chloride	0.37	<0.37	0.00014	<0.00014	1.44	11/03/19 19:08	MJL	75-01-4

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447002
Client Sample ID: PP-2

ProjSampleNum: 70109447002
Matrix: Air

Date Collected: 10/22/19 17:00
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.6	<1.6	0.00029	<0.00029	1.41	11/03/19 19:37	MJL	71-55-6
1,1,2,2-Tetrachloroethane	0.98	<0.98	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	79-34-5
1,1,2-Trichloroethane	0.78	<0.78	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.2	<2.2	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.41	11/03/19 19:37	MJL	75-34-3
1,1-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	75-35-4
1,2,4-Trichlorobenzene	10.6	<10.6	0.0014	<0.0014	1.41	11/03/19 19:37	MJL	120-82-1
1,2,4-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	106-93-4
1,2-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	95-50-1
1,2-Dichloroethane	0.58	<0.58	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	107-06-2
1,2-Dichloropropane	1.3	<1.3	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	78-87-5
1,3,5-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	108-67-8
1,3-Butadiene	0.63	<0.63	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	106-99-0
1,3-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	541-73-1
1,4-Dichlorobenzene	4.3	<4.3	0.0007	<0.0007	1.41	11/03/19 19:37	MJL	106-46-7
2-Butanone (MEK)	4.2	114	0.0014	0.038	1.41	11/03/19 19:37	MJL	78-93-3
2-Hexanone	5.9	7.8	0.0014	0.0019	1.41	11/03/19 19:37	MJL	591-78-6
2-Propanol	3.5	<3.5	0.0014	<0.0014	1.41	11/03/19 19:37	MJL	67-63-0
4-Ethyltoluene	3.5	<3.5	0.0007	<0.0007	1.41	11/03/19 19:37	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	5.9	<5.9	0.0014	<0.0014	1.41	11/03/19 19:37	MJL	108-10-1
Acetone	3.4	26.4	0.0014	0.011	1.41	11/03/19 19:37	MJL	67-64-1
Benzene	0.46	1.5	0.00014	0.00046	1.41	11/03/19 19:37	MJL	71-43-2
Benzyl chloride	3.7	<3.7	0.0007	<0.0007	1.41	11/03/19 19:37	MJL	100-44-7
Bromodichloromethane	1.9	<1.9	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	75-27-4
Bromoform	7.4	<7.4	0.0007	<0.0007	1.41	11/03/19 19:37	MJL	75-25-2
Bromomethane	1.1	<1.1	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	74-83-9
Carbon disulfide	0.89	<0.89	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	75-15-0
Carbon tetrachloride	1.8	<1.8	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	56-23-5
Chlorobenzene	1.3	<1.3	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	108-90-7
Chloroethane	0.76	<0.76	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	75-00-3
Chloroform	0.7	<0.70	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	67-66-3
Chloromethane	0.59	<0.59	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	74-87-3
cis-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	10061-01-5
Cyclohexane	2.5	<2.5	0.00071	<0.00071	1.41	11/03/19 19:37	MJL	110-82-7
Dibromochloromethane	2.4	<2.4	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	124-48-1
Dichlorodifluoromethane	1.4	2.2	0.00028	0.00044	1.41	11/03/19 19:37	MJL	75-71-8
Dichlorotetrafluoroethane	2	<2.0	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	76-14-2
Ethanol	2.7	8.9	0.0014	0.0046	1.41	11/03/19 19:37	MJL	64-17-5
Ethyl acetate	1	<1.0	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.2	<1.2	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	100-41-4
Hexachloro-1,3-butadiene	7.6	<7.6	0.0007	<0.0007	1.41	11/03/19 19:37	MJL	87-68-3
m&p-Xylene	2.5	<2.5	0.00057	<0.00057	1.41	11/03/19 19:37	MJL	179601-23-1
Methylene Chloride	5	5.3	0.0014	0.0015	1.41	11/03/19 19:37	MJL	75-09-2
Methyl-tert-butyl ether	5.2	<5.2	0.0014	<0.0014	1.41	11/03/19 19:37	MJL	1634-04-4
Naphthalene	3.8	<3.8	0.00071	<0.00071	1.41	11/03/19 19:37	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.41	11/03/19 19:37	MJL	142-82-5
n-Hexane	1	<1.0	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	110-54-3
o-Xylene	1.2	<1.2	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	95-47-6
Propylene	0.49	10.7	0.00028	0.0061	1.41	11/03/19 19:37	MJL	115-07-1
Styrene	1.2	<1.2	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	100-42-5
Tetrachloroethene	0.97	172	0.00014	0.025	1.41	11/03/19 19:37	MJL	127-18-4
Tetrahydrofuran	0.85	<0.85	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	109-99-9
Toluene	1.1	<1.1	0.00029	<0.00029	1.41	11/03/19 19:37	MJL	108-88-3
trans-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.41	11/03/19 19:37	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	10061-02-6
Trichloroethene	0.77	<0.77	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	79-01-6
Trichlorofluoromethane	1.6	<1.6	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.41	11/03/19 19:37	MJL	108-05-4
Vinyl chloride	0.37	<0.37	0.00014	<0.00014	1.41	11/03/19 19:37	MJL	75-01-4

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447003
Client Sample ID: PP-3

ProjSampleNum: 70109447003
Matrix: Air

Date Collected: 10/22/19 17:40
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	2.8	<2.8	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1.8	<1.8	0.00026	<0.00026	2.52	11/03/19 20:06	MJL	79-34-5
1,1,2-Trichloroethane	1.4	<1.4	0.00025	<0.00025	2.52	11/03/19 20:06	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	3.9	<3.9	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	76-13-1
1,1-Dichloroethane	2.1	<2.1	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	75-34-3
1,1-Dichloroethene	2	<2.0	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	75-35-4
1,2,4-Trichlorobenzene	19	<19.0	0.0025	<0.0025	2.52	11/03/19 20:06	MJL	120-82-1
1,2,4-Trimethylbenzene	2.5	<2.5	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	95-63-6
1,2-Dibromoethane (EDB)	2	<2.0	0.00026	<0.00026	2.52	11/03/19 20:06	MJL	106-93-4
1,2-Dichlorobenzene	3.1	<3.1	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	95-50-1
1,2-Dichloroethane	1	<1.0	0.00024	<0.00024	2.52	11/03/19 20:06	MJL	107-06-2
1,2-Dichloropropane	2.4	<2.4	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	78-87-5
1,3,5-Trimethylbenzene	2.5	<2.5	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	108-67-8
1,3-Butadiene	1.1	<1.1	0.00049	<0.00049	2.52	11/03/19 20:06	MJL	106-99-0
1,3-Dichlorobenzene	3.1	<3.1	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	541-73-1
1,4-Dichlorobenzene	7.7	<7.7	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	106-46-7
2-Butanone (MEK)	7.6	14.4	0.0025	0.0048	2.52	11/03/19 20:06	MJL	78-93-3
2-Hexanone	10.5	<10.5	0.0025	<0.0025	2.52	11/03/19 20:06	MJL	591-78-6
2-Propanol	6.3	<6.3	0.0025	<0.0025	2.52	11/03/19 20:06	MJL	67-63-0
4-Ethyltoluene	6.3	<6.3	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	10.5	<10.5	0.0025	<0.0025	2.52	11/03/19 20:06	MJL	108-10-1
Acetone	6.1	90.0	0.0025	0.037	2.52	11/03/19 20:06	MJL	67-64-1
Benzene	0.82	1.9	0.00025	0.00059	2.52	11/03/19 20:06	MJL	71-43-2
Benzyl chloride	6.6	<6.6	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	100-44-7
Bromodichloromethane	3.4	<3.4	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	75-27-4
Bromoform	13.2	<13.2	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	75-25-2
Bromomethane	2	<2.0	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	74-83-9
Carbon disulfide	1.6	<1.6	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	75-15-0
Carbon tetrachloride	3.2	<3.2	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	56-23-5
Chlorobenzene	2.4	<2.4	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	108-90-7
Chloroethane	1.4	<1.4	0.00052	<0.00052	2.52	11/03/19 20:06	MJL	75-00-3
Chloroform	1.2	1.5	0.00024	0.0003	2.52	11/03/19 20:06	MJL	67-66-3
Chloromethane	1.1	<1.1	0.00052	<0.00052	2.52	11/03/19 20:06	MJL	74-87-3
cis-1,2-Dichloroethene	2	8.1	0.0005	0.002	2.52	11/03/19 20:06	MJL	156-59-2
cis-1,3-Dichloropropene	2.3	<2.3	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	10061-01-5
Cyclohexane	4.4	<4.4	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	110-82-7
Dibromochloromethane	4.4	<4.4	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	124-48-1
Dichlorodifluoromethane	2.5	<2.5	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	75-71-8
Dichlorotetrafluoroethane	3.6	<3.6	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	76-14-2
Ethanol	4.8	5.1	0.0025	0.0027	2.52	11/03/19 20:06	MJL	64-17-5
Ethyl acetate	1.8	<1.8	0.00049	<0.00049	2.52	11/03/19 20:06	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	2.2	<2.2	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	100-41-4
Hexachloro-1,3-butadiene	13.7	<13.7	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	87-68-3
m&p-Xylene	4.5	<4.5	0.001	<0.001	2.52	11/03/19 20:06	MJL	179601-23-1
Methylene Chloride	8.9	35.9	0.0025	0.01	2.52	11/03/19 20:06	MJL	75-09-2
Methyl-tert-butyl ether	9.2	<9.2	0.0025	<0.0025	2.52	11/03/19 20:06	MJL	1634-04-4
Naphthalene	6.7	<6.7	0.0013	<0.0013	2.52	11/03/19 20:06	MJL	91-20-3
n-Heptane	2.1	<2.1	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	142-82-5
n-Hexane	1.8	4.3	0.0005	0.0012	2.52	11/03/19 20:06	MJL	110-54-3
o-Xylene	2.2	<2.2	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	95-47-6
Propylene	0.88	1.4	0.0005	0.0008	2.52	11/03/19 20:06	MJL	115-07-1
Styrene	2.2	<2.2	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	100-42-5
Tetrachloroethene	8.7	463	0.0013	0.067	12.6	11/04/19 18:04	MJL	127-18-4
Tetrahydrofuran	1.5	<1.5	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	109-99-9
Toluene	1.9	<1.9	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	108-88-3
trans-1,2-Dichloroethene	2	<2.0	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	156-60-5
trans-1,3-Dichloropropene	2.3	<2.3	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	10061-02-6
Trichloroethene	1.4	9.0	0.00026	0.0016	2.52	11/03/19 20:06	MJL	79-01-6
Trichlorofluoromethane	2.9	<2.9	0.00051	<0.00051	2.52	11/03/19 20:06	MJL	75-69-4
Vinyl acetate	1.8	<1.8	0.0005	<0.0005	2.52	11/03/19 20:06	MJL	108-05-4
Vinyl chloride	0.66	<0.66	0.00025	<0.00025	2.52	11/03/19 20:06	MJL	75-01-4

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447004
Client Sample ID: PP-4

ProjSampleNum: 70109447004
Matrix: Air

Date Collected: 10/22/19 16:25
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.5	<1.5	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	71-55-6
1,1,2,2-Tetrachloroethane	0.97	<0.97	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	79-34-5
1,1,2-Trichloroethane	0.77	<0.77	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.2	<2.2	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	76-13-1
1,1-Dichloroethane	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	75-34-3
1,1-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	75-35-4
1,2,4-Trichlorobenzene	10.5	<10.5	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	120-82-1
1,2,4-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	106-93-4
1,2-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	95-50-1
1,2-Dichloroethane	0.57	<0.57	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	107-06-2
1,2-Dichloropropane	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	78-87-5
1,3,5-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	108-67-8
1,3-Butadiene	0.63	<0.63	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	106-99-0
1,3-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	541-73-1
1,4-Dichlorobenzene	4.3	<4.3	0.0007	<0.0007	1.39	11/03/19 20:35	MJL	106-46-7
2-Butanone (MEK)	4.2	<4.2	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	78-93-3
2-Hexanone	5.8	<5.8	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	591-78-6
2-Propanol	3.5	<3.5	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	67-63-0
4-Ethyltoluene	3.5	<3.5	0.0007	<0.0007	1.39	11/03/19 20:35	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	5.8	<5.8	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	108-10-1
Acetone	3.3	8.8	0.0014	0.0036	1.39	11/03/19 20:35	MJL	67-64-1
Benzene	0.45	<0.45	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	71-43-2
Benzyl chloride	3.7	<3.7	0.0007	<0.0007	1.39	11/03/19 20:35	MJL	100-44-7
Bromodichloromethane	1.9	<1.9	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	75-27-4
Bromoform	7.3	<7.3	0.00069	<0.00069	1.39	11/03/19 20:35	MJL	75-25-2
Bromomethane	1.1	<1.1	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	74-83-9
Carbon disulfide	0.88	<0.88	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	75-15-0
Carbon tetrachloride	1.8	<1.8	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	56-23-5
Chlorobenzene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	108-90-7
Chloroethane	0.75	<0.75	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	75-00-3
Chloroform	0.69	2.8	0.00014	0.00056	1.39	11/03/19 20:35	MJL	67-66-3
Chloromethane	0.58	<0.58	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	74-87-3
cis-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	10061-01-5
Cyclohexane	2.4	<2.4	0.00069	<0.00069	1.39	11/03/19 20:35	MJL	110-82-7
Dibromochloromethane	2.4	<2.4	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	124-48-1
Dichlorodifluoromethane	1.4	2.1	0.00028	0.00042	1.39	11/03/19 20:35	MJL	75-71-8
Dichlorotetrafluoroethane	2	<2.0	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	76-14-2
Ethanol	2.7	4.7	0.0014	0.0025	1.39	11/03/19 20:35	MJL	64-17-5
Ethyl acetate	1	<1.0	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.2	<1.2	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	100-41-4
Hexachloro-1,3-butadiene	7.5	<7.5	0.00069	<0.00069	1.39	11/03/19 20:35	MJL	87-68-3
m&p-Xylene	2.5	<2.5	0.00057	<0.00057	1.39	11/03/19 20:35	MJL	179601-23-1
Methylene Chloride	4.9	<4.9	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	75-09-2
Methyl-tert-butyl ether	5.1	<5.1	0.0014	<0.0014	1.39	11/03/19 20:35	MJL	1634-04-4
Naphthalene	3.7	<3.7	0.00069	<0.00069	1.39	11/03/19 20:35	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.39	11/03/19 20:35	MJL	142-82-5
n-Hexane	1	<1.0	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	110-54-3
o-Xylene	1.2	<1.2	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	95-47-6
Propylene	0.49	<0.49	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	115-07-1
Styrene	1.2	<1.2	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	100-42-5
Tetrachloroethene	19.2	399	0.0028	0.058	27.8	11/04/19 19:02	MJL	127-18-4
Tetrahydrofuran	0.83	<0.83	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	109-99-9
Toluene	1.1	<1.1	0.00029	<0.00029	1.39	11/03/19 20:35	MJL	108-88-3
trans-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 20:35	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	10061-02-6
Trichloroethene	0.76	2.0	0.00014	0.00037	1.39	11/03/19 20:35	MJL	79-01-6
Trichlorofluoromethane	1.6	<1.6	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.39	11/03/19 20:35	MJL	108-05-4
Vinyl chloride	0.36	<0.36	0.00014	<0.00014	1.39	11/03/19 20:35	MJL	75-01-4

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1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447005
Client Sample ID: PPB-5

ProjSampleNum: 70109447005
Matrix: Air

Date Collected: 10/22/19 15:47
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.7	<1.7	0.00031	<0.00031	1.49	11/03/19 21:04	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.49	11/03/19 21:04	MJL	79-34-5
1,1,2-Trichloroethane	0.83	<0.83	0.00015	<0.00015	1.49	11/03/19 21:04	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.3	<2.3	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	75-35-4
1,2,4-Trichlorobenzene	11.2	<11.2	0.0015	<0.0015	1.49	11/03/19 21:04	MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.2	<1.2	0.00015	<0.00015	1.49	11/03/19 21:04	MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	95-50-1
1,2-Dichloroethane	0.61	<0.61	0.00015	<0.00015	1.49	11/03/19 21:04	MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	108-67-8
1,3-Butadiene	0.67	<0.67	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	541-73-1
1,4-Dichlorobenzene	4.6	<4.6	0.00075	<0.00075	1.49	11/03/19 21:04	MJL	106-46-7
2-Butanone (MEK)	4.5	42.3	0.0015	0.014	1.49	11/03/19 21:04	MJL	78-93-3
2-Hexanone	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 21:04	MJL	591-78-6
2-Propanol	3.7	<3.7	0.0015	<0.0015	1.49	11/03/19 21:04	MJL	67-63-0
4-Ethyltoluene	3.7	<3.7	0.00074	<0.00074	1.49	11/03/19 21:04	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 21:04	MJL	108-10-1
Acetone	3.6	9.9	0.0015	0.0041	1.49	11/03/19 21:04	MJL	67-64-1
Benzene	0.48	0.74	0.00015	0.00023	1.49	11/03/19 21:04	MJL	71-43-2
Benzyl chloride	3.9	<3.9	0.00074	<0.00074	1.49	11/03/19 21:04	MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	75-27-4
Bromoform	7.8	<7.8	0.00074	<0.00074	1.49	11/03/19 21:04	MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	74-83-9
Carbon disulfide	0.94	<0.94	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	75-15-0
Carbon tetrachloride	1.9	<1.9	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	56-23-5
Chlorobenzene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	108-90-7
Chloroethane	0.8	<0.80	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	75-00-3
Chloroform	0.74	2.3	0.00015	0.00046	1.49	11/03/19 21:04	MJL	67-66-3
Chloromethane	0.63	<0.63	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	156-59-2
cis-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	10061-01-5
Cyclohexane	2.6	<2.6	0.00074	<0.00074	1.49	11/03/19 21:04	MJL	110-82-7
Dibromochloromethane	2.6	<2.6	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	124-48-1
Dichlorodifluoromethane	1.5	2.0	0.0003	0.0004	1.49	11/03/19 21:04	MJL	75-71-8
Dichlorotetrafluoroethane	2.1	<2.1	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	76-14-2
Ethanol	2.9	4.8	0.0015	0.0025	1.49	11/03/19 21:04	MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	100-41-4
Hexachloro-1,3-butadiene	8.1	<8.1	0.00075	<0.00075	1.49	11/03/19 21:04	MJL	87-68-3
m&p-Xylene	2.6	<2.6	0.00059	<0.00059	1.49	11/03/19 21:04	MJL	179601-23-1
Methylene Chloride	5.3	5.4	0.0015	0.0015	1.49	11/03/19 21:04	MJL	75-09-2
Methyl-tert-butyl ether	5.5	<5.5	0.0015	<0.0015	1.49	11/03/19 21:04	MJL	1634-04-4
Naphthalene	4	<4.0	0.00075	<0.00075	1.49	11/03/19 21:04	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	142-82-5
n-Hexane	1.1	<1.1	0.00031	<0.00031	1.49	11/03/19 21:04	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	95-47-6
Propylene	0.52	<0.52	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	115-07-1
Styrene	1.3	<1.3	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	100-42-5
Tetrachloroethene	1	132	0.00015	0.019	1.49	11/03/19 21:04	MJL	127-18-4
Tetrahydrofuran	0.89	<0.89	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	109-99-9
Toluene	1.1	<1.1	0.00029	<0.00029	1.49	11/03/19 21:04	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	156-60-5
trans-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	10061-02-6
Trichloroethene	0.81	<0.81	0.00015	<0.00015	1.49	11/03/19 21:04	MJL	79-01-6
Trichlorofluoromethane	1.7	<1.7	0.0003	<0.0003	1.49	11/03/19 21:04	MJL	75-69-4
Vinyl acetate	1.1	<1.1	0.00031	<0.00031	1.49	11/03/19 21:04	MJL	108-05-4
Vinyl chloride	0.39	<0.39	0.00015	<0.00015	1.49	11/03/19 21:04	MJL	75-01-4

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447006
Client Sample ID: PPB-6

ProjSampleNum: 70109447006
Matrix: Air

Date Collected: 10/22/19 16:00
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.7	<1.7	0.00031	<0.00031	1.49	11/03/19 21:33	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.49	11/03/19 21:33	MJL	79-34-5
1,1,2-Trichloroethane	0.83	<0.83	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.3	<2.3	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	75-35-4
1,2,4-Trichlorobenzene	11.2	<11.2	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.2	<1.2	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	95-50-1
1,2-Dichloroethane	0.61	<0.61	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	108-67-8
1,3-Butadiene	0.67	<0.67	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	541-73-1
1,4-Dichlorobenzene	4.6	<4.6	0.00075	<0.00075	1.49	11/03/19 21:33	MJL	106-46-7
2-Butanone (MEK)	4.5	24.1	0.0015	0.008	1.49	11/03/19 21:33	MJL	78-93-3
2-Hexanone	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	591-78-6
2-Propanol	3.7	<3.7	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	67-63-0
4-Ethyltoluene	3.7	<3.7	0.00074	<0.00074	1.49	11/03/19 21:33	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	108-10-1
Acetone	3.6	15.4	0.0015	0.0064	1.49	11/03/19 21:33	MJL	67-64-1
Benzene	0.48	1.8	0.00015	0.00055	1.49	11/03/19 21:33	MJL	71-43-2
Benzyl chloride	3.9	<3.9	0.00074	<0.00074	1.49	11/03/19 21:33	MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	75-27-4
Bromoform	7.8	<7.8	0.00074	<0.00074	1.49	11/03/19 21:33	MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	74-83-9
Carbon disulfide	0.94	13.6	0.0003	0.0043	1.49	11/03/19 21:33	MJL	75-15-0
Carbon tetrachloride	1.9	<1.9	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	56-23-5
Chlorobenzene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	108-90-7
Chloroethane	0.8	<0.80	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	75-00-3
Chloroform	0.74	<0.74	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	67-66-3
Chloromethane	0.63	0.70	0.0003	0.00033	1.49	11/03/19 21:33	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	156-59-2
cis-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	10061-01-5
Cyclohexane	2.6	<2.6	0.00074	<0.00074	1.49	11/03/19 21:33	MJL	110-82-7
Dibromochloromethane	2.6	<2.6	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	124-48-1
Dichlorodifluoromethane	1.5	2.4	0.0003	0.00048	1.49	11/03/19 21:33	MJL	75-71-8
Dichlorotetrafluoroethane	2.1	<2.1	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	76-14-2
Ethanol	2.9	<2.9	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	100-41-4
Hexachloro-1,3-butadiene	8.1	<8.1	0.00075	<0.00075	1.49	11/03/19 21:33	MJL	87-68-3
m&p-Xylene	2.6	<2.6	0.00059	<0.00059	1.49	11/03/19 21:33	MJL	179601-23-1
Methylene Chloride	5.3	<5.3	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	75-09-2
Methyl-tert-butyl ether	5.5	<5.5	0.0015	<0.0015	1.49	11/03/19 21:33	MJL	1634-04-4
Naphthalene	4	<4.0	0.00075	<0.00075	1.49	11/03/19 21:33	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	142-82-5
n-Hexane	1.1	1.3	0.00031	0.00036	1.49	11/03/19 21:33	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 21:33	MJL	95-47-6
Propylene	0.52	6.2	0.0003	0.0035	1.49	11/03/19 21:33	MJL	115-07-1
Styrene	1.3	<1.3	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	100-42-5
Tetrachloroethene	1	22.7	0.00015	0.0033	1.49	11/03/19 21:33	MJL	127-18-4
Tetrahydrofuran	0.89	<0.89	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	109-99-9
Toluene	1.1	1.7	0.00029	0.00044	1.49	11/03/19 21:33	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	156-60-5
trans-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	10061-02-6
Trichloroethene	0.81	<0.81	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	79-01-6
Trichlorofluoromethane	1.7	<1.7	0.0003	<0.0003	1.49	11/03/19 21:33	MJL	75-69-4
Vinyl acetate	1.1	<1.1	0.00031	<0.00031	1.49	11/03/19 21:33	MJL	108-05-4
Vinyl chloride	0.39	<0.39	0.00015	<0.00015	1.49	11/03/19 21:33	MJL	75-01-4

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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447007
Client Sample ID: INFLUENT PORT

ProjSampleNum: 70109447007
Matrix: Air

Date Collected: 10/22/19 17:25
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.5	<1.5	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	71-55-6
1,1,2,2-Tetrachloroethane	0.97	<0.97	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	79-34-5
1,1,2-Trichloroethane	0.77	<0.77	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.2	<2.2	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	76-13-1
1,1-Dichloroethane	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	75-34-3
1,1-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	75-35-4
1,2,4-Trichlorobenzene	10.5	<10.5	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	120-82-1
1,2,4-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	106-93-4
1,2-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	95-50-1
1,2-Dichloroethane	0.57	<0.57	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	107-06-2
1,2-Dichloropropane	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	78-87-5
1,3,5-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	108-67-8
1,3-Butadiene	0.63	<0.63	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	106-99-0
1,3-Dichlorobenzene	1.7	<1.7	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	541-73-1
1,4-Dichlorobenzene	4.3	<4.3	0.0007	<0.0007	1.39	11/03/19 22:02	MJL	106-46-7
2-Butanone (MEK)	4.2	10.4	0.0014	0.0035	1.39	11/03/19 22:02	MJL	78-93-3
2-Hexanone	5.8	<5.8	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	591-78-6
2-Propanol	3.5	<3.5	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	67-63-0
4-Ethyltoluene	3.5	<3.5	0.0007	<0.0007	1.39	11/03/19 22:02	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	5.8	<5.8	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	108-10-1
Acetone	3.3	8.3	0.0014	0.0034	1.39	11/03/19 22:02	MJL	67-64-1
Benzene	0.45	<0.45	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	71-43-2
Benzyl chloride	3.7	<3.7	0.0007	<0.0007	1.39	11/03/19 22:02	MJL	100-44-7
Bromodichloromethane	1.9	<1.9	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	75-27-4
Bromoform	7.3	<7.3	0.00069	<0.00069	1.39	11/03/19 22:02	MJL	75-25-2
Bromomethane	1.1	<1.1	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	74-83-9
Carbon disulfide	0.88	<0.88	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	75-15-0
Carbon tetrachloride	1.8	<1.8	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	56-23-5
Chlorobenzene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	108-90-7
Chloroethane	0.75	<0.75	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	75-00-3
Chloroform	0.69	0.78	0.00014	0.00016	1.39	11/03/19 22:02	MJL	67-66-3
Chloromethane	0.58	<0.58	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	74-87-3
cis-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	10061-01-5
Cyclohexane	2.4	<2.4	0.00069	<0.00069	1.39	11/03/19 22:02	MJL	110-82-7
Dibromochloromethane	2.4	<2.4	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	124-48-1
Dichlorodifluoromethane	1.4	2.8	0.00028	0.00056	1.39	11/03/19 22:02	MJL	75-71-8
Dichlorotetrafluoroethane	2	<2.0	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	76-14-2
Ethanol	2.7	4.0	0.0014	0.0021	1.39	11/03/19 22:02	MJL	64-17-5
Ethyl acetate	1	<1.0	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.2	<1.2	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	100-41-4
Hexachloro-1,3-butadiene	7.5	<7.5	0.00069	<0.00069	1.39	11/03/19 22:02	MJL	87-68-3
m&p-Xylene	2.5	<2.5	0.00057	<0.00057	1.39	11/03/19 22:02	MJL	179601-23-1
Methylene Chloride	4.9	<4.9	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	75-09-2
Methyl-tert-butyl ether	5.1	<5.1	0.0014	<0.0014	1.39	11/03/19 22:02	MJL	1634-04-4
Naphthalene	3.7	<3.7	0.00069	<0.00069	1.39	11/03/19 22:02	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.39	11/03/19 22:02	MJL	142-82-5
n-Hexane	1	<1.0	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	110-54-3
o-Xylene	1.2	<1.2	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	95-47-6
Propylene	0.49	<0.49	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	115-07-1
Styrene	1.2	<1.2	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	100-42-5
Tetrachloroethene	19.2	331	0.0028	0.048	27.8	11/04/19 19:30	MJL	127-18-4
Tetrahydrofuran	0.83	<0.83	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	109-99-9
Toluene	1.1	1.2	0.00029	0.00031	1.39	11/03/19 22:02	MJL	108-88-3
trans-1,2-Dichloroethene	1.1	<1.1	0.00027	<0.00027	1.39	11/03/19 22:02	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	10061-02-6
Trichloroethene	0.76	24.8	0.00014	0.0045	1.39	11/03/19 22:02	MJL	79-01-6
Trichlorofluoromethane	1.6	<1.6	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.39	11/03/19 22:02	MJL	108-05-4
Vinyl chloride	0.36	<0.36	0.00014	<0.00014	1.39	11/03/19 22:02	MJL	75-01-4

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447008
Client Sample ID: EFFLUENT PORT

ProjSampleNum: 70109447008
Matrix: Air

Date Collected: 10/22/19 17:05
Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.7	<1.7	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1.1	<1.1	0.00016	<0.00016	1.55	11/03/19 22:31	MJL	79-34-5
1,1,2-Trichloroethane	0.86	<0.86	0.00016	<0.00016	1.55	11/03/19 22:31	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.4	<2.4	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	76-13-1
1,1-Dichloroethane	1.3	<1.3	0.00032	<0.00032	1.55	11/03/19 22:31	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	75-35-4
1,2,4-Trichlorobenzene	11.7	<11.7	0.0016	<0.0016	1.55	11/03/19 22:31	MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.2	<1.2	0.00015	<0.00015	1.55	11/03/19 22:31	MJL	106-93-4
1,2-Dichlorobenzene	1.9	<1.9	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	95-50-1
1,2-Dichloroethane	0.64	<0.64	0.00016	<0.00016	1.55	11/03/19 22:31	MJL	107-06-2
1,2-Dichloropropane	1.5	<1.5	0.00032	<0.00032	1.55	11/03/19 22:31	MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	108-67-8
1,3-Butadiene	0.7	<0.70	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	106-99-0
1,3-Dichlorobenzene	1.9	<1.9	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	541-73-1
1,4-Dichlorobenzene	4.7	<4.7	0.00077	<0.00077	1.55	11/03/19 22:31	MJL	106-46-7
2-Butanone (MEK)	4.6	<4.6	0.0015	<0.0015	1.55	11/03/19 22:31	MJL	78-93-3
2-Hexanone	6.4	<6.4	0.0015	<0.0015	1.55	11/03/19 22:31	MJL	591-78-6
2-Propanol	3.9	<3.9	0.0016	<0.0016	1.55	11/03/19 22:31	MJL	67-63-0
4-Ethyltoluene	3.9	<3.9	0.00078	<0.00078	1.55	11/03/19 22:31	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.4	<6.4	0.0015	<0.0015	1.55	11/03/19 22:31	MJL	108-10-1
Acetone	3.7	51.7	0.0015	0.021	1.55	11/03/19 22:31	MJL	67-64-1
Benzene	0.5	0.58	0.00015	0.00018	1.55	11/03/19 22:31	MJL	71-43-2
Benzyl chloride	4.1	<4.1	0.00078	<0.00078	1.55	11/03/19 22:31	MJL	100-44-7
Bromodichloromethane	2.1	<2.1	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	75-27-4
Bromoform	8.1	<8.1	0.00077	<0.00077	1.55	11/03/19 22:31	MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	74-83-9
Carbon disulfide	0.98	<0.98	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	75-15-0
Carbon tetrachloride	2	<2.0	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	56-23-5
Chlorobenzene	1.5	<1.5	0.00032	<0.00032	1.55	11/03/19 22:31	MJL	108-90-7
Chloroethane	0.83	<0.83	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	75-00-3
Chloroform	0.77	1.3	0.00016	0.00026	1.55	11/03/19 22:31	MJL	67-66-3
Chloromethane	0.65	<0.65	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	156-59-2
cis-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	10061-01-5
Cyclohexane	2.7	<2.7	0.00077	<0.00077	1.55	11/03/19 22:31	MJL	110-82-7
Dibromochloromethane	2.7	<2.7	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	124-48-1
Dichlorodifluoromethane	1.6	3.1	0.00032	0.00062	1.55	11/03/19 22:31	MJL	75-71-8
Dichlorotetrafluoroethane	2.2	<2.2	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	76-14-2
Ethanol	3	6.3	0.0016	0.0033	1.55	11/03/19 22:31	MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.4	<1.4	0.00032	<0.00032	1.55	11/03/19 22:31	MJL	100-41-4
Hexachloro-1,3-butadiene	8.4	<8.4	0.00077	<0.00077	1.55	11/03/19 22:31	MJL	87-68-3
m&p-Xylene	2.7	3.3	0.00061	0.00075	1.55	11/03/19 22:31	MJL	179601-23-1
Methylene Chloride	5.5	<5.5	0.0016	<0.0016	1.55	11/03/19 22:31	MJL	75-09-2
Methyl-tert-butyl ether	5.7	<5.7	0.0016	<0.0016	1.55	11/03/19 22:31	MJL	1634-04-4
Naphthalene	4.1	<4.1	0.00077	<0.00077	1.55	11/03/19 22:31	MJL	91-20-3
n-Heptane	1.3	<1.3	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	142-82-5
n-Hexane	1.1	<1.1	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	110-54-3
o-Xylene	1.4	<1.4	0.00032	<0.00032	1.55	11/03/19 22:31	MJL	95-47-6
Propylene	0.54	<0.54	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	115-07-1
Styrene	1.3	<1.3	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	100-42-5
Tetrachloroethene	1.1	4.1	0.00016	0.00059	1.55	11/03/19 22:31	MJL	127-18-4
Tetrahydrofuran	0.93	<0.93	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	109-99-9
Toluene	1.2	6.5	0.00031	0.0017	1.55	11/03/19 22:31	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	9.9	0.0003	0.0025	1.55	11/03/19 22:31	MJL	156-60-5
trans-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.55	11/03/19 22:31	MJL	10061-02-6
Trichloroethene	0.85	<0.85	0.00016	<0.00016	1.55	11/03/19 22:31	MJL	79-01-6
Trichlorofluoromethane	1.8	1.8	0.00032	0.00032	1.55	11/03/19 22:31	MJL	75-69-4
Vinyl acetate	1.1	<1.1	0.00031	<0.00031	1.55	11/03/19 22:31	MJL	108-05-4
Vinyl chloride	0.4	<0.40	0.00015	<0.00015	1.55	11/03/19 22:31	MJL	75-01-4

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Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447009 ProjSampleNum: 70109447009 Date Collected: 10/22/19 16:45
Client Sample ID: INDOOR AMBIENT AIR Matrix: Air Date Received: 10/24/19 9:30

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed	CAS No.
Air							
TO-15							
1,1,1-Trichloroethane	1.7	<1.7	0.00031	<0.00031	1.49	11/03/19 23:00 MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.49	11/03/19 23:00 MJL	79-34-5
1,1,2-Trichloroethane	0.83	<0.83	0.00015	<0.00015	1.49	11/03/19 23:00 MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.3	<2.3	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 23:00 MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	75-35-4
1,2,4-Trichlorobenzene	11.2	<11.2	0.0015	<0.0015	1.49	11/03/19 23:00 MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	1.9	0.0003	0.00038	1.49	11/03/19 23:00 MJL	95-63-6
1,2-Dibromoethane (EDB)	1.2	<1.2	0.00015	<0.00015	1.49	11/03/19 23:00 MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 23:00 MJL	95-50-1
1,2-Dichloroethane	0.61	<0.61	0.00015	<0.00015	1.49	11/03/19 23:00 MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	108-67-8
1,3-Butadiene	0.67	<0.67	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.49	11/03/19 23:00 MJL	541-73-1
1,4-Dichlorobenzene	4.6	<4.6	0.00075	<0.00075	1.49	11/03/19 23:00 MJL	106-46-7
2-Butanone (MEK)	4.5	<4.5	0.0015	<0.0015	1.49	11/03/19 23:00 MJL	78-93-3
2-Hexanone	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 23:00 MJL	591-78-6
2-Propanol	3.7	<3.7	0.0015	<0.0015	1.49	11/03/19 23:00 MJL	67-63-0
4-Ethyltoluene	3.7	<3.7	0.00074	<0.00074	1.49	11/03/19 23:00 MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.2	<6.2	0.0015	<0.0015	1.49	11/03/19 23:00 MJL	108-10-1
Acetone	3.6	13.2	0.0015	0.0055	1.49	11/03/19 23:00 MJL	67-64-1
Benzene	0.48	<0.48	0.00015	<0.00015	1.49	11/03/19 23:00 MJL	71-43-2
Benzyl chloride	3.9	<3.9	0.00074	<0.00074	1.49	11/03/19 23:00 MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.49	11/03/19 23:00 MJL	75-27-4
Bromoform	7.8	<7.8	0.00074	<0.00074	1.49	11/03/19 23:00 MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	74-83-9
Carbon disulfide	0.94	2.2	0.0003	0.00069	1.49	11/03/19 23:00 MJL	75-15-0
Carbon tetrachloride	1.9	<1.9	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	56-23-5
Chlorobenzene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	108-90-7
Chloroethane	0.8	<0.80	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	75-00-3
Chloroform	0.74	<0.74	0.00015	<0.00015	1.49	11/03/19 23:00 MJL	67-66-3
Chloromethane	0.63	0.83	0.0003	0.0004	1.49	11/03/19 23:00 MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	156-59-2
cis-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	10061-01-5
Cyclohexane	2.6	<2.6	0.00074	<0.00074	1.49	11/03/19 23:00 MJL	110-82-7
Dibromochloromethane	2.6	<2.6	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	124-48-1
Dichlorodifluoromethane	1.5	2.4	0.0003	0.00048	1.49	11/03/19 23:00 MJL	75-71-8
Dichlorotetrafluoroethane	2.1	<2.1	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	76-14-2
Ethanol	2.9	19.0	0.0015	0.0099	1.49	11/03/19 23:00 MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.49	11/03/19 23:00 MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 23:00	MJL	100-41-4
Hexachloro-1,3-butadiene	8.1	<8.1	0.00075	<0.00075	1.49	11/03/19 23:00	MJL	87-68-3
m&p-Xylene	2.6	<2.6	0.00059	<0.00059	1.49	11/03/19 23:00	MJL	179601-23-1
Methylene Chloride	5.3	10.7	0.0015	0.003	1.49	11/03/19 23:00	MJL	75-09-2
Methyl-tert-butyl ether	5.5	<5.5	0.0015	<0.0015	1.49	11/03/19 23:00	MJL	1634-04-4
Naphthalene	4	<4.0	0.00075	<0.00075	1.49	11/03/19 23:00	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.49	11/03/19 23:00	MJL	142-82-5
n-Hexane	1.1	<1.1	0.00031	<0.00031	1.49	11/03/19 23:00	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.49	11/03/19 23:00	MJL	95-47-6
Propylene	0.52	<0.52	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	115-07-1
Styrene	1.3	<1.3	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	100-42-5
Tetrachloroethene	1	263	0.00015	0.038	1.49	11/03/19 23:00	MJL	127-18-4
Tetrahydrofuran	0.89	<0.89	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	109-99-9
Toluene	1.1	2.0	0.00029	0.00052	1.49	11/03/19 23:00	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	156-60-5
trans-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	10061-02-6
Trichloroethene	0.81	46.6	0.00015	0.0085	1.49	11/03/19 23:00	MJL	79-01-6
Trichlorofluoromethane	1.7	<1.7	0.0003	<0.0003	1.49	11/03/19 23:00	MJL	75-69-4
Vinyl acetate	1.1	<1.1	0.00031	<0.00031	1.49	11/03/19 23:00	MJL	108-05-4
Vinyl chloride	0.39	<0.39	0.00015	<0.00015	1.49	11/03/19 23:00	MJL	75-01-4

Pace Analytical Services, Inc.
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Minneapolis, MN 55414
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Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Lab Sample No: 70109447010 ProjSampleNum: 70109447010 Date Collected: 10/22/19 16:55
Client Sample ID: OUTDOOR AMBIENT AIR Matrix: Air Date Received: 10/24/19 9:30

Air

TO-15

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
1,1,1-Trichloroethane	1.6	<1.6	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	79-34-5
1,1,2-Trichloroethane	0.8	<0.80	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.2	<2.2	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 23:29	MJL	75-35-4
1,2,4-Trichlorobenzene	10.9	<10.9	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	120-82-1
1,2,4-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	95-50-1
1,2-Dichloroethane	0.59	<0.59	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.44	11/03/19 23:29	MJL	78-87-5
1,3,5-Trimethylbenzene	1.4	<1.4	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	108-67-8
1,3-Butadiene	0.65	<0.65	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	541-73-1
1,4-Dichlorobenzene	4.4	<4.4	0.00072	<0.00072	1.44	11/03/19 23:29	MJL	106-46-7
2-Butanone (MEK)	4.3	<4.3	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	78-93-3
2-Hexanone	6	<6.0	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	591-78-6
2-Propanol	3.6	<3.6	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	67-63-0
4-Ethyltoluene	3.6	<3.6	0.00072	<0.00072	1.44	11/03/19 23:29	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6	<6.0	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	108-10-1
Acetone	3.5	8.6	0.0014	0.0036	1.44	11/03/19 23:29	MJL	67-64-1
Benzene	0.47	0.48	0.00014	0.00015	1.44	11/03/19 23:29	MJL	71-43-2
Benzyl chloride	3.8	<3.8	0.00072	<0.00072	1.44	11/03/19 23:29	MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	75-27-4
Bromoform	7.6	<7.6	0.00072	<0.00072	1.44	11/03/19 23:29	MJL	75-25-2
Bromomethane	1.1	<1.1	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	74-83-9
Carbon disulfide	0.91	<0.91	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	75-15-0
Carbon tetrachloride	1.8	<1.8	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	56-23-5
Chlorobenzene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	108-90-7
Chloroethane	0.77	<0.77	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	75-00-3
Chloroform	0.71	<0.71	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	67-66-3
Chloromethane	0.6	0.61	0.00029	0.00029	1.44	11/03/19 23:29	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 23:29	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	10061-01-5
Cyclohexane	2.5	<2.5	0.00071	<0.00071	1.44	11/03/19 23:29	MJL	110-82-7
Dibromochloromethane	2.5	<2.5	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	124-48-1
Dichlorodifluoromethane	1.5	2.4	0.0003	0.00048	1.44	11/03/19 23:29	MJL	75-71-8
Dichlorotetrafluoroethane	2	<2.0	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	76-14-2
Ethanol	2.8	3.4	0.0015	0.0018	1.44	11/03/19 23:29	MJL	64-17-5
Ethyl acetate	1.1	<1.1	0.0003	<0.0003	1.44	11/03/19 23:29	MJL	141-78-6

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Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496798
Project Name: 70109447 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	100-41-4
Hexachloro-1,3-butadiene	7.8	<7.8	0.00072	<0.00072	1.44	11/03/19 23:29	MJL	87-68-3
m&p-Xylene	2.5	<2.5	0.00057	<0.00057	1.44	11/03/19 23:29	MJL	179601-23-1
Methylene Chloride	5.1	<5.1	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	75-09-2
Methyl-tert-butyl ether	5.3	<5.3	0.0014	<0.0014	1.44	11/03/19 23:29	MJL	1634-04-4
Naphthalene	3.8	<3.8	0.00071	<0.00071	1.44	11/03/19 23:29	MJL	91-20-3
n-Heptane	1.2	<1.2	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	142-82-5
n-Hexane	1	<1.0	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	95-47-6
Propylene	0.5	<0.50	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	115-07-1
Styrene	1.2	<1.2	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	100-42-5
Tetrachloroethene	0.99	69.7	0.00014	0.01	1.44	11/03/19 23:29	MJL	127-18-4
Tetrahydrofuran	0.86	<0.86	0.00029	<0.00029	1.44	11/03/19 23:29	MJL	109-99-9
Toluene	1.1	1.5	0.00029	0.00039	1.44	11/03/19 23:29	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.44	11/03/19 23:29	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	10061-02-6
Trichloroethene	0.79	<0.79	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	79-01-6
Trichlorofluoromethane	1.6	<1.6	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.44	11/03/19 23:29	MJL	108-05-4
Vinyl chloride	0.37	<0.37	0.00014	<0.00014	1.44	11/03/19 23:29	MJL	75-01-4

APPENDIX B

Groundwater Sampling Results

and

Water Quality Data Log

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

October 30, 2019

Marc Califano
Cashin Associates
1200 Veterans Memorial Highway
Hauppauge, NY 11788

RE: Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Dear Marc Califano:
Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Thomas Ryan, Bayville Cleaners

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Melville, NY 11747
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CERTIFICATIONS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747
New York Certification #: 10478 Primary Accrediting Body
New Jersey Certification #: NY158
Pennsylvania Certification #: 68-00350
Connecticut Certification #: PH-0435
Maryland Certification #: 208
Rhode Island Certification #: LAO00340
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

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Melville, NY 11747
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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-1 10-22-19 **Lab ID: 70109506001** Collected: 10/22/19 14:36 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**<5.0**	ug/L	5.0	1		10/28/19 15:21	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	108-86-1	
Bromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-25-2	CL
Bromomethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	74-83-9	L1
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		10/28/19 15:21	78-93-3	IL
n-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	104-51-8	L1
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	135-98-8	L1
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		10/28/19 15:21	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		10/28/19 15:21	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	106-43-4	L1
Dibromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		10/28/19 15:21	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	10061-02-6	
1,4-Diethylbenzene	**1.4**	ug/L	1.0	1		10/28/19 15:21	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		10/28/19 15:21	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	87-68-3	
2-Hexanone	**<5.0**	ug/L	5.0	1		10/28/19 15:21	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		10/28/19 15:21	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	99-87-6	L1
Methylene Chloride	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-09-2	

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(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-1 10-22-19 **Lab ID: 70109506001** Collected: 10/22/19 14:36 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		10/28/19 15:21	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		10/28/19 15:21	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	127-18-4	
1,2,4,5-tetramethylbenzene	**1.2**	ug/L	1.0	1		10/28/19 15:21	95-93-2	L1,N3
Toluene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	87-61-6	L1
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	1		10/28/19 15:21	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:21	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		10/28/19 15:21	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		10/28/19 15:21	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		10/28/19 15:21	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		10/28/19 15:21	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	68-153	1		10/28/19 15:21	17060-07-0	
4-Bromofluorobenzene (S)	94	%	79-124	1		10/28/19 15:21	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/28/19 15:21	2037-26-5	

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-2 10-22-19 **Lab ID: 70109506002** Collected: 10/22/19 13:40 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**<5.0**	ug/L	5.0	1		10/28/19 15:44	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	108-86-1	
Bromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-25-2	CL,M1
Bromomethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	74-83-9	L1
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		10/28/19 15:44	78-93-3	IL
n-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	104-51-8	L1
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	135-98-8	L1
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		10/28/19 15:44	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		10/28/19 15:44	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	106-43-4	L1
Dibromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		10/28/19 15:44	106-93-4	M1
Dibromomethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	10061-02-6	M1
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		10/28/19 15:44	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	87-68-3	
2-Hexanone	**<5.0**	ug/L	5.0	1		10/28/19 15:44	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		10/28/19 15:44	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	99-87-6	L1
Methylene Chloride	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-09-2	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-2 10-22-19 **Lab ID: 70109506002** Collected: 10/22/19 13:40 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		10/28/19 15:44	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		10/28/19 15:44	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	95-93-2	L1,N3
Toluene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	87-61-6	L1
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 15:44	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		10/28/19 15:44	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		10/28/19 15:44	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		10/28/19 15:44	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		10/28/19 15:44	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	68-153	1		10/28/19 15:44	17060-07-0	
4-Bromofluorobenzene (S)	94	%	79-124	1		10/28/19 15:44	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/28/19 15:44	2037-26-5	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-3 10-22-19 **Lab ID: 70109506003** Collected: 10/22/19 12:15 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**<5.0**	ug/L	5.0	1		10/28/19 16:07	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	108-86-1	
Bromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-25-2	CL
Bromomethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	74-83-9	L1
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		10/28/19 16:07	78-93-3	IL
n-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	104-51-8	L1
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	135-98-8	L1
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		10/28/19 16:07	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		10/28/19 16:07	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	106-43-4	L1
Dibromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		10/28/19 16:07	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	10061-02-6	
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		10/28/19 16:07	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	87-68-3	
2-Hexanone	**<5.0**	ug/L	5.0	1		10/28/19 16:07	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		10/28/19 16:07	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	99-87-6	L1
Methylene Chloride	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-09-2	

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Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-3 10-22-19 **Lab ID: 70109506003** Collected: 10/22/19 12:15 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		10/28/19 16:07	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		10/28/19 16:07	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	95-93-2	L1,N3
Toluene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	87-61-6	L1
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:07	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		10/28/19 16:07	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		10/28/19 16:07	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		10/28/19 16:07	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		10/28/19 16:07	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	68-153	1		10/28/19 16:07	17060-07-0	
4-Bromofluorobenzene (S)	94	%	79-124	1		10/28/19 16:07	460-00-4	
Toluene-d8 (S)	97	%	69-124	1		10/28/19 16:07	2037-26-5	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-4 10-22-19 **Lab ID: 70109506004** Collected: 10/22/19 13:01 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**<5.0**	ug/L	5.0	1		10/28/19 16:30	67-64-1	IC
Benzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	108-86-1	
Bromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-25-2	CL
Bromomethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	74-83-9	L1
2-Butanone (MEK)	**<5.0**	ug/L	5.0	1		10/28/19 16:30	78-93-3	IL
n-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	104-51-8	L1
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	135-98-8	L1
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		10/28/19 16:30	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		10/28/19 16:30	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	106-43-4	L1
Dibromochloromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		10/28/19 16:30	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-35-4	
cis-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	10061-02-6	
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		10/28/19 16:30	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	87-68-3	
2-Hexanone	**<5.0**	ug/L	5.0	1		10/28/19 16:30	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		10/28/19 16:30	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	99-87-6	L1
Methylene Chloride	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-09-2	

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ANALYTICAL RESULTS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Sample: MW-4 10-22-19 **Lab ID: 70109506004** Collected: 10/22/19 13:01 Received: 10/23/19 12:51 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<5.0**	ug/L	5.0	1		10/28/19 16:30	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		10/28/19 16:30	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	79-34-5	
Tetrachloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	95-93-2	L1,N3
Toluene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	87-61-6	L1
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	79-00-5	
Trichloroethene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		10/28/19 16:30	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		10/28/19 16:30	75-01-4	
Xylene (Total)	**<3.0**	ug/L	3.0	1		10/28/19 16:30	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		10/28/19 16:30	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		10/28/19 16:30	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	68-153	1		10/28/19 16:30	17060-07-0	
4-Bromofluorobenzene (S)	95	%	79-124	1		10/28/19 16:30	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/28/19 16:30	2037-26-5	

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

QC Batch: 136104 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Associated Lab Samples: 70109506001, 70109506002, 70109506003, 70109506004

METHOD BLANK: 651461 Matrix: Water
Associated Lab Samples: 70109506001, 70109506002, 70109506003, 70109506004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,1-Dichloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,1-Dichloroethene	ug/L	<1.0	1.0	10/28/19 09:59	
1,1-Dichloropropene	ug/L	<1.0	1.0	10/28/19 09:59	
1,2,3-Trichlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	10/28/19 09:59	
1,2,4,5-tetramethylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	N3
1,2,4-Trichlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,2,4-Trimethylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,2-Dibromoethane (EDB)	ug/L	<1.0	1.0	10/28/19 09:59	
1,2-Dichlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,2-Dichloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
1,2-Dichloropropane	ug/L	<1.0	1.0	10/28/19 09:59	
1,3,5-Trimethylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,3-Dichloropropane	ug/L	<1.0	1.0	10/28/19 09:59	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
1,4-Diethylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	N3
2,2-Dichloropropane	ug/L	<1.0	1.0	10/28/19 09:59	
2-Butanone (MEK)	ug/L	<5.0	5.0	10/28/19 09:59	IL
2-Chlorotoluene	ug/L	<1.0	1.0	10/28/19 09:59	
2-Hexanone	ug/L	<5.0	5.0	10/28/19 09:59	
4-Chlorotoluene	ug/L	<1.0	1.0	10/28/19 09:59	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	10/28/19 09:59	
Acetone	ug/L	<5.0	5.0	10/28/19 09:59	IC
Benzene	ug/L	<1.0	1.0	10/28/19 09:59	
Bromobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Bromochloromethane	ug/L	<1.0	1.0	10/28/19 09:59	
Bromodichloromethane	ug/L	<1.0	1.0	10/28/19 09:59	
Bromoform	ug/L	<1.0	1.0	10/28/19 09:59	CL
Bromomethane	ug/L	<1.0	1.0	10/28/19 09:59	
Carbon disulfide	ug/L	<1.0	1.0	10/28/19 09:59	
Carbon tetrachloride	ug/L	<1.0	1.0	10/28/19 09:59	
Chlorobenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Chlorodifluoromethane	ug/L	<1.0	1.0	10/28/19 09:59	N3
Chloroethane	ug/L	<1.0	1.0	10/28/19 09:59	
Chloroform	ug/L	<1.0	1.0	10/28/19 09:59	
Chloromethane	ug/L	<1.0	1.0	10/28/19 09:59	

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

METHOD BLANK: 651461 Matrix: Water
Associated Lab Samples: 70109506001, 70109506002, 70109506003, 70109506004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	10/28/19 09:59	
cis-1,3-Dichloropropene	ug/L	<1.0	1.0	10/28/19 09:59	
Dibromochloromethane	ug/L	<1.0	1.0	10/28/19 09:59	
Dibromomethane	ug/L	<1.0	1.0	10/28/19 09:59	
Dichlorodifluoromethane	ug/L	<1.0	1.0	10/28/19 09:59	
Ethanol	ug/L	<250	250	10/28/19 09:59	
Ethylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Hexachloro-1,3-butadiene	ug/L	<1.0	1.0	10/28/19 09:59	
Isopropylbenzene (Cumene)	ug/L	<1.0	1.0	10/28/19 09:59	
m&p-Xylene	ug/L	<2.0	2.0	10/28/19 09:59	
Methyl-tert-butyl ether	ug/L	<1.0	1.0	10/28/19 09:59	
Methylene Chloride	ug/L	<1.0	1.0	10/28/19 09:59	
n-Butylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
n-Propylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Naphthalene	ug/L	<1.0	1.0	10/28/19 09:59	
o-Xylene	ug/L	<1.0	1.0	10/28/19 09:59	
p-Isopropyltoluene	ug/L	<1.0	1.0	10/28/19 09:59	
sec-Butylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Styrene	ug/L	<1.0	1.0	10/28/19 09:59	
tert-Butylbenzene	ug/L	<1.0	1.0	10/28/19 09:59	
Tetrachloroethene	ug/L	<1.0	1.0	10/28/19 09:59	
Toluene	ug/L	<1.0	1.0	10/28/19 09:59	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	10/28/19 09:59	
trans-1,3-Dichloropropene	ug/L	<1.0	1.0	10/28/19 09:59	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	1.0	10/28/19 09:59	
Trichloroethene	ug/L	<1.0	1.0	10/28/19 09:59	
Trichlorofluoromethane	ug/L	<1.0	1.0	10/28/19 09:59	
Vinyl chloride	ug/L	<1.0	1.0	10/28/19 09:59	
Xylene (Total)	ug/L	<3.0	3.0	10/28/19 09:59	
1,2-Dichloroethane-d4 (S)	%	96	68-153	10/28/19 09:59	
4-Bromofluorobenzene (S)	%	95	79-124	10/28/19 09:59	
Toluene-d8 (S)	%	92	69-124	10/28/19 09:59	

LABORATORY CONTROL SAMPLE: 651462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	41.9	84	74-113	
1,1,1-Trichloroethane	ug/L	50	47.5	95	65-118	
1,1,2,2-Tetrachloroethane	ug/L	50	50.8	102	74-121	
1,1,2-Trichloroethane	ug/L	50	50.3	101	80-117	
1,1-Dichloroethane	ug/L	50	55.4	111	83-151	
1,1-Dichloroethene	ug/L	50	55.6	111	45-146	
1,1-Dichloropropene	ug/L	50	52.0	104	59-127	
1,2,3-Trichlorobenzene	ug/L	50	53.4	107	67-103	L1

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

LABORATORY CONTROL SAMPLE: 651462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,3-Trichloropropane	ug/L	50	45.2	90	71-123	
1,2,4,5-tetramethylbenzene	ug/L	50	52.2	104	66-103	L1,N3
1,2,4-Trichlorobenzene	ug/L	50	51.8	104	66-116	
1,2,4-Trimethylbenzene	ug/L	50	49.9	100	68-116	
1,2-Dibromoethane (EDB)	ug/L	50	46.4	93	83-115	
1,2-Dichlorobenzene	ug/L	50	48.4	97	74-113	
1,2-Dichloroethane	ug/L	50	53.9	108	74-129	
1,2-Dichloropropane	ug/L	50	51.5	103	75-117	
1,3,5-Trimethylbenzene	ug/L	50	49.8	100	67-116	
1,3-Dichlorobenzene	ug/L	50	47.7	95	71-112	
1,3-Dichloropropane	ug/L	50	49.6	99	74-112	
1,4-Dichlorobenzene	ug/L	50	47.6	95	71-113	
1,4-Diethylbenzene	ug/L	50	53.2	106	56-130	N3
2,2-Dichloropropane	ug/L	50	50.8	102	63-133	
2-Butanone (MEK)	ug/L	50	40.6	81	44-162	IL
2-Chlorotoluene	ug/L	50	50.3	101	74-101	
2-Hexanone	ug/L	50	44.0	88	32-183	
4-Chlorotoluene	ug/L	50	51.2	102	74-101	L1
4-Methyl-2-pentanone (MIBK)	ug/L	50	48.3	97	69-132	
Acetone	ug/L	50	49.9	100	23-188	IC
Benzene	ug/L	50	50.6	101	73-119	
Bromobenzene	ug/L	50	45.4	91	72-102	
Bromochloromethane	ug/L	50	53.7	107	81-116	
Bromodichloromethane	ug/L	50	48.8	98	78-117	
Bromoform	ug/L	50	36.0	72	65-122	CL
Bromomethane	ug/L	50	80.8	162	52-147	CH,L1
Carbon disulfide	ug/L	50	52.0	104	41-144	
Carbon tetrachloride	ug/L	50	50.1	100	59-120	
Chlorobenzene	ug/L	50	46.4	93	75-113	
Chlorodifluoromethane	ug/L	50	50.6	101	43-140	N3
Chloroethane	ug/L	50	57.9	116	49-151	
Chloroform	ug/L	50	56.4	113	72-122	
Chloromethane	ug/L	50	64.2	128	46-144	CH
cis-1,2-Dichloroethene	ug/L	50	53.9	108	72-121	
cis-1,3-Dichloropropene	ug/L	50	48.5	97	78-116	
Dibromochloromethane	ug/L	50	42.7	85	70-120	
Dibromomethane	ug/L	50	47.4	95	75-125	
Dichlorodifluoromethane	ug/L	50	42.6	85	22-154	
Ethanol	ug/L	1250	1260	101	10-151	
Ethylbenzene	ug/L	50	46.8	94	70-113	
Hexachloro-1,3-butadiene	ug/L	50	53.4	107	59-121	
Isopropylbenzene (Cumene)	ug/L	50	49.8	100	67-115	
m&p-Xylene	ug/L	100	92.0	92	72-115	
Methyl-tert-butyl ether	ug/L	50	53.2	106	72-131	
Methylene Chloride	ug/L	50	58.3	117	61-142	
n-Butylbenzene	ug/L	50	57.3	115	73-107	L1
n-Propylbenzene	ug/L	50	52.2	104	68-116	

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

LABORATORY CONTROL SAMPLE: 651462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/L	50	55.1	110	70-118	
o-Xylene	ug/L	50	46.0	92	73-117	
p-Isopropyltoluene	ug/L	50	51.0	102	73-101	L1
sec-Butylbenzene	ug/L	50	52.9	106	72-103	L1
Styrene	ug/L	50	46.1	92	72-118	
tert-Butylbenzene	ug/L	50	50.0	100	68-100	
Tetrachloroethene	ug/L	50	43.1	86	60-128	
Toluene	ug/L	50	50.6	101	72-119	
trans-1,2-Dichloroethene	ug/L	50	55.2	110	56-142	
trans-1,3-Dichloropropene	ug/L	50	45.0	90	79-116	
trans-1,4-Dichloro-2-butene	ug/L	50	57.2	114	71-121	
Trichloroethene	ug/L	50	48.0	96	69-117	
Trichlorofluoromethane	ug/L	50	58.6	117	27-173	
Vinyl chloride	ug/L	50	62.2	124	43-143	CH
Xylene (Total)	ug/L	150	138	92	71-109	
1,2-Dichloroethane-d4 (S)	%			92	68-153	
4-Bromofluorobenzene (S)	%			96	79-124	
Toluene-d8 (S)	%			93	69-124	

MATRIX SPIKE SAMPLE: 651805

Parameter	Units	70109506002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	36.8	74	74-113	
1,1,1-Trichloroethane	ug/L	<1.0	50	42.0	84	65-118	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	48.5	97	74-121	
1,1,2-Trichloroethane	ug/L	<1.0	50	45.0	90	80-117	
1,1-Dichloroethane	ug/L	<1.0	50	51.3	103	83-151	
1,1-Dichloroethene	ug/L	<1.0	50	48.7	97	45-146	
1,1-Dichloropropene	ug/L	<1.0	50	46.7	93	59-127	
1,2,3-Trichlorobenzene	ug/L	<1.0	50	42.2	84	67-103	
1,2,3-Trichloropropane	ug/L	<1.0	50	41.5	83	71-123	
1,2,4,5-tetramethylbenzene	ug/L	<1.0	50	43.7	87	66-103	N3
1,2,4-Trichlorobenzene	ug/L	<1.0	50	40.9	82	66-116	
1,2,4-Trimethylbenzene	ug/L	<1.0	50	44.6	89	68-116	
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	40.6	81	83-115	M1
1,2-Dichlorobenzene	ug/L	<1.0	50	42.7	85	74-113	
1,2-Dichloroethane	ug/L	<1.0	50	49.4	99	74-129	
1,2-Dichloropropane	ug/L	<1.0	50	46.6	93	75-117	
1,3,5-Trimethylbenzene	ug/L	<1.0	50	44.7	89	67-116	
1,3-Dichlorobenzene	ug/L	<1.0	50	42.1	84	71-112	
1,3-Dichloropropane	ug/L	<1.0	50	45.7	91	74-112	
1,4-Dichlorobenzene	ug/L	<1.0	50	41.9	84	71-113	
1,4-Diethylbenzene	ug/L	<1.0	50	44.4	89	56-130	N3
2,2-Dichloropropane	ug/L	<1.0	50	42.3	85	63-133	
2-Butanone (MEK)	ug/L	<5.0	50	36.2	72	44-162	IL

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

MATRIX SPIKE SAMPLE: 651805

Parameter	Units	70109506002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Chlorotoluene	ug/L	<1.0	50	46.1	92	74-101	
2-Hexanone	ug/L	<5.0	50	42.5	85	32-183	
4-Chlorotoluene	ug/L	<1.0	50	46.4	93	74-101	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	44.6	89	69-132	
Acetone	ug/L	<5.0	50	48.5	97	23-188	IC
Benzene	ug/L	<1.0	50	45.9	92	73-119	
Bromobenzene	ug/L	<1.0	50	40.8	82	72-102	
Bromochloromethane	ug/L	<1.0	50	48.5	97	81-116	
Bromodichloromethane	ug/L	<1.0	50	44.7	89	78-117	
Bromoform	ug/L	<1.0	50	31.3	63	65-122	CL,M1
Bromomethane	ug/L	<1.0	50	44.4	89	52-147	CH
Carbon disulfide	ug/L	<1.0	50	43.7	87	41-144	
Carbon tetrachloride	ug/L	<1.0	50	44.7	89	59-120	
Chlorobenzene	ug/L	<1.0	50	41.9	84	75-113	
Chlorodifluoromethane	ug/L	<1.0	50	35.5	71	43-140	N3
Chloroethane	ug/L	<1.0	50	46.9	94	49-151	
Chloroform	ug/L	<1.0	50	52.3	105	72-122	
Chloromethane	ug/L	<1.0	50	40.1	80	46-144	CH
cis-1,2-Dichloroethene	ug/L	<1.0	50	49.7	99	72-121	
cis-1,3-Dichloropropene	ug/L	<1.0	50	41.5	83	78-116	
Dibromochloromethane	ug/L	<1.0	50	37.2	74	70-120	
Dibromomethane	ug/L	<1.0	50	42.6	85	75-125	
Dichlorodifluoromethane	ug/L	<1.0	50	19.1	38	22-154	
Ethanol	ug/L	<250	1250	916	73	10-151	
Ethylbenzene	ug/L	<1.0	50	42.2	84	70-113	
Hexachloro-1,3-butadiene	ug/L	<1.0	50	39.3	79	59-121	
Isopropylbenzene (Cumene)	ug/L	<1.0	50	45.6	91	67-115	
m&p-Xylene	ug/L	<2.0	100	82.2	82	72-115	
Methyl-tert-butyl ether	ug/L	<1.0	50	47.2	94	72-131	
Methylene Chloride	ug/L	<1.0	50	48.1	96	61-142	
n-Butylbenzene	ug/L	<1.0	50	47.7	95	73-107	
n-Propylbenzene	ug/L	<1.0	50	47.1	94	68-116	
Naphthalene	ug/L	<1.0	50	46.7	93	70-118	
o-Xylene	ug/L	<1.0	50	41.3	83	73-117	
p-Isopropyltoluene	ug/L	<1.0	50	43.4	87	73-101	
sec-Butylbenzene	ug/L	<1.0	50	45.5	91	72-103	
Styrene	ug/L	<1.0	50	41.7	83	72-118	
tert-Butylbenzene	ug/L	<1.0	50	44.2	88	68-100	
Tetrachloroethene	ug/L	<1.0	50	38.8	78	60-128	
Toluene	ug/L	<1.0	50	45.8	92	72-119	
trans-1,2-Dichloroethene	ug/L	<1.0	50	49.0	98	56-142	
trans-1,3-Dichloropropene	ug/L	<1.0	50	38.6	77	79-116	M1
trans-1,4-Dichloro-2-butene	ug/L	<1.0	50	46.6	93	71-121	
Trichloroethene	ug/L	<1.0	50	43.7	87	69-117	
Trichlorofluoromethane	ug/L	<1.0	50	46.7	93	27-173	
Vinyl chloride	ug/L	<1.0	50	44.3	89	43-143	CH
Xylene (Total)	ug/L	<3.0	150	124	82	71-109	

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

MATRIX SPIKE SAMPLE: 651805

Parameter	Units	70109506002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%				99	68-153	
4-Bromofluorobenzene (S)	%				91	79-124	
Toluene-d8 (S)	%				97	69-124	

SAMPLE DUPLICATE: 651804

Parameter	Units	70109506001 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,1-Trichloroethane	ug/L	<1.0	<1.0		
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,2-Trichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethene	ug/L	<1.0	<1.0		
1,1-Dichloropropene	ug/L	<1.0	<1.0		
1,2,3-Trichlorobenzene	ug/L	<1.0	<1.0		
1,2,3-Trichloropropane	ug/L	<1.0	<1.0		
1,2,4,5-tetramethylbenzene	ug/L	1.2	1.0	12	N3
1,2,4-Trichlorobenzene	ug/L	<1.0	<1.0		
1,2,4-Trimethylbenzene	ug/L	<1.0	<1.0		
1,2-Dibromoethane (EDB)	ug/L	<1.0	<1.0		
1,2-Dichlorobenzene	ug/L	<1.0	<1.0		
1,2-Dichloroethane	ug/L	<1.0	<1.0		
1,2-Dichloropropane	ug/L	<1.0	<1.0		
1,3,5-Trimethylbenzene	ug/L	<1.0	<1.0		
1,3-Dichlorobenzene	ug/L	<1.0	<1.0		
1,3-Dichloropropane	ug/L	<1.0	<1.0		
1,4-Dichlorobenzene	ug/L	<1.0	<1.0		
1,4-Diethylbenzene	ug/L	1.4	1.4	4	N3
2,2-Dichloropropane	ug/L	<1.0	<1.0		
2-Butanone (MEK)	ug/L	<5.0	<5.0		IL
2-Chlorotoluene	ug/L	<1.0	<1.0		
2-Hexanone	ug/L	<5.0	<5.0		
4-Chlorotoluene	ug/L	<1.0	<1.0		
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0		
Acetone	ug/L	<5.0	<5.0		IC
Benzene	ug/L	<1.0	<1.0		
Bromobenzene	ug/L	<1.0	<1.0		
Bromochloromethane	ug/L	<1.0	<1.0		
Bromodichloromethane	ug/L	<1.0	<1.0		
Bromoform	ug/L	<1.0	<1.0		CL
Bromomethane	ug/L	<1.0	<1.0		
Carbon disulfide	ug/L	<1.0	<1.0		
Carbon tetrachloride	ug/L	<1.0	<1.0		
Chlorobenzene	ug/L	<1.0	<1.0		
Chlorodifluoromethane	ug/L	<1.0	<1.0		N3

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QUALITY CONTROL DATA

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

SAMPLE DUPLICATE: 651804

Parameter	Units	70109506001 Result	Dup Result	RPD	Qualifiers
Chloroethane	ug/L	<1.0	<1.0		
Chloroform	ug/L	<1.0	<1.0		
Chloromethane	ug/L	<1.0	<1.0		
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0		
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0		
Dibromochloromethane	ug/L	<1.0	<1.0		
Dibromomethane	ug/L	<1.0	<1.0		
Dichlorodifluoromethane	ug/L	<1.0	<1.0		
Ethanol	ug/L	<250	<250		
Ethylbenzene	ug/L	<1.0	<1.0		
Hexachloro-1,3-butadiene	ug/L	<1.0	<1.0		
Isopropylbenzene (Cumene)	ug/L	<1.0	<1.0		
m&p-Xylene	ug/L	<2.0	<2.0		
Methyl-tert-butyl ether	ug/L	<1.0	<1.0		
Methylene Chloride	ug/L	<1.0	<1.0		
n-Butylbenzene	ug/L	<1.0	<1.0		
n-Propylbenzene	ug/L	<1.0	<1.0		
Naphthalene	ug/L	<1.0	<1.0		
o-Xylene	ug/L	<1.0	<1.0		
p-Isopropyltoluene	ug/L	<1.0	<1.0		
sec-Butylbenzene	ug/L	<1.0	<1.0		
Styrene	ug/L	<1.0	<1.0		
tert-Butylbenzene	ug/L	<1.0	<1.0		
Tetrachloroethene	ug/L	<1.0	<1.0		
Toluene	ug/L	<1.0	<1.0		
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0		
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0		
trans-1,4-Dichloro-2-butene	ug/L	<1.0	<1.0		
Trichloroethene	ug/L	1.3	1.4	5	
Trichlorofluoromethane	ug/L	<1.0	<1.0		
Vinyl chloride	ug/L	<1.0	<1.0		
Xylene (Total)	ug/L	<3.0	<3.0		
1,2-Dichloroethane-d4 (S)	%	95	96		
4-Bromofluorobenzene (S)	%	94	94		
Toluene-d8 (S)	%	96	97		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
IC	The initial calibration for this compound was outside of method control limits. The result is estimated.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N3	Accreditation is not offered by the relevant laboratory accrediting body for this parameter.

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Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BAYVILLE VILLAGE CLEANERS10/22
Pace Project No.: 70109506

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70109506001	**MW-1 10-22-19**	EPA 8260C/5030C	136104		
70109506002	**MW-2 10-22-19**	EPA 8260C/5030C	136104		
70109506003	**MW-3 10-22-19**	EPA 8260C/5030C	136104		
70109506004	**MW-4 10-22-19**	EPA 8260C/5030C	136104		

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WO#:70109506

70109506

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Project Information:

Company:	Cashin Associates
Address:	1200 Veterans Memorial Highway
	Hauppauge, NY 11788
Email:	mcalifano@ca-pc.com
Phone:	(631)348-7600 Fax: 631-348-7601
Requested Due Date:	STD

Report Information:

Report To:	Marc Califano
Copy To:	TOM Ryan
Purchase Order #:	
Project Name:	Bayville Village Dry Cea
Project #:	13CTS.030 T7

Section C
Invoice Information:

Attention:	TOM Ryan
Company Name:	Bayville Cleaners
Address:	19 Todd Drive, Glen Head, NY 11545
Pace Quote:	x
Pace Project Manager:	sophia.sparkes@pacelabs.com,
Pace Profile #:	6535

Regulatory Agency	
State / Location	NY

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	8260 VOCs Full List	Residual Chlorine (Y/N)	
1	MW-1 10-22-19	WT	G	10-22-19	2:36	10-22-19			2				X					X	X		001
2	MW-2 10-22-19	WT	G	10-22-19	1:40	10-22-19			2				X					X	X		002
3	MW-3 10-22-19	WT	G	10-22-19	12:15	10-22-19			2				X					X	X		003
4	MW-4 10-22-19	WT	G	10-22-19	1:01	10-22-19			2				X					X	X		004
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Marc Califano CASHIN	10/23/19	12:50	Pacell	10/23/19	12:51	4.8	W	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARC CALIFANO CASHIN

SIGNATURE of SAMPLER: Marc Califano

DATE Signed: 10/23/19

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

Sample Condition Upon Receipt

WO#: 70109506
PM: SIS Due Date: 10/30/19
CLIENT: CAS-ECO

Client Name: Cashin Pro

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☒ No Seals intact: ☐ Yes ☒ No Temperature Blank Present: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☒ None ☐ Other Type of Ice: (Wet) Blue None

Thermometer Used: TH094 Correction Factor: +0.2 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): 4.6 Cooler Temperature Corrected (°C): 4.8 Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☒ N/A, water sample) Date and Initials of person examining contents: 10/23/19 SP

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☒Yes	☐No		1.
Chain of Custody Filled Out:	☒Yes	☐No		2.
Chain of Custody Relinquished:	☒Yes	☐No		3.
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☒Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☒No		6.
Rush Turn Around Time Requested:	☐Yes	☒No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☒Yes	☐No		8.
Correct Containers Used:	☒Yes	☐No		9.
-Pace Containers Used:	☒Yes	☐No		
Containers Intact:	☒Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☒N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☒Yes	☐No		12.
-Includes date/time/ID/Analysis Matrix SL (WT) OIL				
All containers needing preservation have been checked	☐Yes	☐No	☒N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☒N/A	Sample # / Initial when completed: / Lot # of added preservative: / Date/Time preservative added
Samples checked for dechlorination:	☐Yes	☐No	☒N/A	14.
KI starch test strips Lot #				
Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☒No	☐N/A	15.
Trip Blank Present:	☐Yes	☒No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☒N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

GROUNDWATER SAMPLING LOG

SITE NAME: Bayville Village Dry Cleaners	SITE LOCATION: 290 Bayville Avenue, Village of Bayville, NY
DATE: 10/22/2019	SAMPLERS: Marc Califano & Rachel Lambert

PURGING & WATER QUALITY DATA

FOUR INCH WELLS

Well #	Sample Time	DTW	DTB	DO (mg/L)	pH	TEMP (C)	ORP	COND (us/cm)	Turbidity
MW-1	1436	8.31	18.20	2.18	6.34	20.02	-96	0.258	0.0
MW-2	1340	7.20	17.45	2.34	6.68	20.24	-57	0.392	7.5
MW-3	1215	6.06	17.55	3.15	6.62	19.36	-111	0.292	8.2
MW-4	1301	7.29	18.35	2.90	6.82	19.36	-60	0.383	0.0

WELL CAP.(gal/ft): 0.75"=0.02; 1"=0.04; 1.25"=0.06; 2"=0.16; 3"=0.37; 4"=0.65; 5"=1.02; 6"=1.47; 12"=5.88
1 WELL VOLUME (gal) = (DTB – DTW) X WELL CAPACITY

ANALYSIS & METHOD:
VOC's Only

APPENDIX C

Southern Adjacent Residential Property
Vapor Gas Sampling Results

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

November 06, 2019

Marc Califano
Cashin Associates
1200 Veterans Memorial Highway
Hauppauge, NY 11788

RE: Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Dear Marc Califano:
Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

cc: Thomas Ryan, Bayville Cleaners

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Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

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(631)694-3040

SAMPLE ANALYTE COUNT

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70109449001	**SOUTHERN ADJ RESIDENCE SUBSLAB**	TO-15	MJL	61	PASI-M
70109449002	**SOUTHERN RES INDR AMBIENT AIR**	TO-15	MJL	61	PASI-M
70109449003	**SOUTHERN RES OUTDR AMBIENT AIR**	TO-15	MJL	61	PASI-M

REPORT OF LABORATORY ANALYSIS

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN ADJ RESIDENCE SUBSLAB **Lab ID: 70109449001** Collected: 10/23/19 10:18 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**163**	ug/m3	3.5	1.46		11/03/19 17:15	67-64-1	
Benzene	**0.81**	ug/m3	0.47	1.46		11/03/19 17:15	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.46		11/03/19 17:15	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.46		11/03/19 17:15	75-27-4	
Bromoform	**<7.7**	ug/m3	7.7	1.46		11/03/19 17:15	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	74-83-9	
1,3-Butadiene	**<0.66**	ug/m3	0.66	1.46		11/03/19 17:15	106-99-0	
2-Butanone (MEK)	**6.8**	ug/m3	4.4	1.46		11/03/19 17:15	78-93-3	
Carbon disulfide	**<0.92**	ug/m3	0.92	1.46		11/03/19 17:15	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.46		11/03/19 17:15	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.46		11/03/19 17:15	108-90-7	
Chloroethane	**<0.78**	ug/m3	0.78	1.46		11/03/19 17:15	75-00-3	
Chloroform	**2.4**	ug/m3	0.72	1.46		11/03/19 17:15	67-66-3	
Chloromethane	**<0.61**	ug/m3	0.61	1.46		11/03/19 17:15	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.46		11/03/19 17:15	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.46		11/03/19 17:15	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.46		11/03/19 17:15	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.46		11/03/19 17:15	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.46		11/03/19 17:15	541-73-1	
1,4-Dichlorobenzene	**<4.5**	ug/m3	4.5	1.46		11/03/19 17:15	106-46-7	
Dichlorodifluoromethane	**266**	ug/m3	7.4	7.3		11/04/19 17:06	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	75-34-3	
1,2-Dichloroethane	**5.3**	ug/m3	0.60	1.46		11/03/19 17:15	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	75-35-4	
cis-1,2-Dichloroethene	**3.5**	ug/m3	1.2	1.46		11/03/19 17:15	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.46		11/03/19 17:15	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.46		11/03/19 17:15	76-14-2	
Ethanol	**771**	ug/m3	14.0	7.3		11/04/19 17:06	64-17-5	
Ethyl acetate	**14.5**	ug/m3	1.1	1.46		11/03/19 17:15	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.46		11/03/19 17:15	622-96-8	
n-Heptane	**18.0**	ug/m3	1.2	1.46		11/03/19 17:15	142-82-5	
Hexachloro-1,3-butadiene	**<7.9**	ug/m3	7.9	1.46		11/03/19 17:15	87-68-3	
n-Hexane	**1.6**	ug/m3	1.0	1.46		11/03/19 17:15	110-54-3	
2-Hexanone	**<6.1**	ug/m3	6.1	1.46		11/03/19 17:15	591-78-6	
Methylene Chloride	**<5.2**	ug/m3	5.2	1.46		11/03/19 17:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.1**	ug/m3	6.1	1.46		11/03/19 17:15	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.46		11/03/19 17:15	1634-04-4	
Naphthalene	**<3.9**	ug/m3	3.9	1.46		11/03/19 17:15	91-20-3	
2-Propanol	**357**	ug/m3	3.6	1.46		11/03/19 17:15	67-63-0	
Propylene	**<0.51**	ug/m3	0.51	1.46		11/03/19 17:15	115-07-1	
Styrene	**1.6**	ug/m3	1.3	1.46		11/03/19 17:15	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.46		11/03/19 17:15	79-34-5	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN ADJ RESIDENCE SUBSLAB **Lab ID: 70109449001** Collected: 10/23/19 10:18 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**10.3**	ug/m3	1.0	1.46		11/03/19 17:15	127-18-4	
Tetrahydrofuran	**<0.88**	ug/m3	0.88	1.46		11/03/19 17:15	109-99-9	
Toluene	**3.7**	ug/m3	1.1	1.46		11/03/19 17:15	108-88-3	
1,2,4-Trichlorobenzene	**<11.0**	ug/m3	11.0	1.46		11/03/19 17:15	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.46		11/03/19 17:15	71-55-6	
1,1,2-Trichloroethane	**<0.81**	ug/m3	0.81	1.46		11/03/19 17:15	79-00-5	
Trichloroethene	**<0.80**	ug/m3	0.80	1.46		11/03/19 17:15	79-01-6	
Trichlorofluoromethane	**1.9**	ug/m3	1.7	1.46		11/03/19 17:15	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.46		11/03/19 17:15	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.46		11/03/19 17:15	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.46		11/03/19 17:15	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.46		11/03/19 17:15	108-05-4	
Vinyl chloride	**<0.38**	ug/m3	0.38	1.46		11/03/19 17:15	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.46		11/03/19 17:15	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	95-47-6	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN RES INDR AMBIENT AIR **Lab ID: 70109449002** Collected: 10/23/19 10:17 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**120**	ug/m3	3.7	1.55		11/03/19 17:44	67-64-1	
Benzene	**<0.50**	ug/m3	0.50	1.55		11/03/19 17:44	71-43-2	
Benzyl chloride	**<4.1**	ug/m3	4.1	1.55		11/03/19 17:44	100-44-7	
Bromodichloromethane	**<2.1**	ug/m3	2.1	1.55		11/03/19 17:44	75-27-4	
Bromoform	**<8.1**	ug/m3	8.1	1.55		11/03/19 17:44	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	74-83-9	
1,3-Butadiene	**<0.70**	ug/m3	0.70	1.55		11/03/19 17:44	106-99-0	
2-Butanone (MEK)	**4.7**	ug/m3	4.6	1.55		11/03/19 17:44	78-93-3	
Carbon disulfide	**<0.98**	ug/m3	0.98	1.55		11/03/19 17:44	75-15-0	
Carbon tetrachloride	**<2.0**	ug/m3	2.0	1.55		11/03/19 17:44	56-23-5	
Chlorobenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	108-90-7	
Chloroethane	**<0.83**	ug/m3	0.83	1.55		11/03/19 17:44	75-00-3	
Chloroform	**1.3**	ug/m3	0.77	1.55		11/03/19 17:44	67-66-3	
Chloromethane	**<0.65**	ug/m3	0.65	1.55		11/03/19 17:44	74-87-3	
Cyclohexane	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	110-82-7	
Dibromochloromethane	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	106-93-4	
1,2-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 17:44	95-50-1	
1,3-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 17:44	541-73-1	
1,4-Dichlorobenzene	**<4.7**	ug/m3	4.7	1.55		11/03/19 17:44	106-46-7	
Dichlorodifluoromethane	**6.9**	ug/m3	1.6	1.55		11/03/19 17:44	75-71-8	
1,1-Dichloroethane	**<1.3**	ug/m3	1.3	1.55		11/03/19 17:44	75-34-3	
1,2-Dichloroethane	**6.2**	ug/m3	0.64	1.55		11/03/19 17:44	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	156-60-5	
1,2-Dichloropropane	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	10061-02-6	
Dichlorotetrafluoroethane	**<2.2**	ug/m3	2.2	1.55		11/03/19 17:44	76-14-2	
Ethanol	**698**	ug/m3	3.0	1.55		11/03/19 17:44	64-17-5	E
Ethyl acetate	**16.3**	ug/m3	1.1	1.55		11/03/19 17:44	141-78-6	
Ethylbenzene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	100-41-4	
4-Ethyltoluene	**<3.9**	ug/m3	3.9	1.55		11/03/19 17:44	622-96-8	
n-Heptane	**22.5**	ug/m3	1.3	1.55		11/03/19 17:44	142-82-5	
Hexachloro-1,3-butadiene	**<8.4**	ug/m3	8.4	1.55		11/03/19 17:44	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	110-54-3	
2-Hexanone	**<6.4**	ug/m3	6.4	1.55		11/03/19 17:44	591-78-6	
Methylene Chloride	**8.6**	ug/m3	5.5	1.55		11/03/19 17:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.4**	ug/m3	6.4	1.55		11/03/19 17:44	108-10-1	
Methyl-tert-butyl ether	**<5.7**	ug/m3	5.7	1.55		11/03/19 17:44	1634-04-4	
Naphthalene	**<4.1**	ug/m3	4.1	1.55		11/03/19 17:44	91-20-3	
2-Propanol	**419**	ug/m3	3.9	1.55		11/03/19 17:44	67-63-0	
Propylene	**<0.54**	ug/m3	0.54	1.55		11/03/19 17:44	115-07-1	
Styrene	**2.1**	ug/m3	1.3	1.55		11/03/19 17:44	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	79-34-5	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN RES INDR AMBIENT AIR **Lab ID: 70109449002** Collected: 10/23/19 10:17 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**7.7**	ug/m3	1.1	1.55		11/03/19 17:44	127-18-4	
Tetrahydrofuran	**<0.93**	ug/m3	0.93	1.55		11/03/19 17:44	109-99-9	
Toluene	**3.2**	ug/m3	1.2	1.55		11/03/19 17:44	108-88-3	
1,2,4-Trichlorobenzene	**<11.7**	ug/m3	11.7	1.55		11/03/19 17:44	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.55		11/03/19 17:44	71-55-6	
1,1,2-Trichloroethane	**<0.86**	ug/m3	0.86	1.55		11/03/19 17:44	79-00-5	
Trichloroethene	**<0.85**	ug/m3	0.85	1.55		11/03/19 17:44	79-01-6	
Trichlorofluoromethane	**1.8**	ug/m3	1.8	1.55		11/03/19 17:44	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.4**	ug/m3	2.4	1.55		11/03/19 17:44	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	108-05-4	
Vinyl chloride	**<0.40**	ug/m3	0.40	1.55		11/03/19 17:44	75-01-4	
m&p-Xylene	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	179601-23-1	
o-Xylene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	95-47-6	

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ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN RES OUTDR AMBIENT AIR **Lab ID: 70109449003** Collected: 10/23/19 10:15 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**10.3**	ug/m3	4.0	1.68		11/03/19 18:13	67-64-1	
Benzene	**<0.55**	ug/m3	0.55	1.68		11/03/19 18:13	71-43-2	
Benzyl chloride	**<4.4**	ug/m3	4.4	1.68		11/03/19 18:13	100-44-7	
Bromodichloromethane	**<2.3**	ug/m3	2.3	1.68		11/03/19 18:13	75-27-4	
Bromoform	**<8.8**	ug/m3	8.8	1.68		11/03/19 18:13	75-25-2	
Bromomethane	**<1.3**	ug/m3	1.3	1.68		11/03/19 18:13	74-83-9	
1,3-Butadiene	**<0.76**	ug/m3	0.76	1.68		11/03/19 18:13	106-99-0	
2-Butanone (MEK)	**<5.0**	ug/m3	5.0	1.68		11/03/19 18:13	78-93-3	
Carbon disulfide	**<1.1**	ug/m3	1.1	1.68		11/03/19 18:13	75-15-0	
Carbon tetrachloride	**<2.2**	ug/m3	2.2	1.68		11/03/19 18:13	56-23-5	
Chlorobenzene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	108-90-7	
Chloroethane	**<0.90**	ug/m3	0.90	1.68		11/03/19 18:13	75-00-3	
Chloroform	**<0.83**	ug/m3	0.83	1.68		11/03/19 18:13	67-66-3	
Chloromethane	**<0.71**	ug/m3	0.71	1.68		11/03/19 18:13	74-87-3	
Cyclohexane	**<2.9**	ug/m3	2.9	1.68		11/03/19 18:13	110-82-7	
Dibromochloromethane	**<2.9**	ug/m3	2.9	1.68		11/03/19 18:13	124-48-1	
1,2-Dibromoethane (EDB)	**<1.3**	ug/m3	1.3	1.68		11/03/19 18:13	106-93-4	
1,2-Dichlorobenzene	**<2.0**	ug/m3	2.0	1.68		11/03/19 18:13	95-50-1	
1,3-Dichlorobenzene	**<2.0**	ug/m3	2.0	1.68		11/03/19 18:13	541-73-1	
1,4-Dichlorobenzene	**<5.1**	ug/m3	5.1	1.68		11/03/19 18:13	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.7	1.68		11/03/19 18:13	75-71-8	
1,1-Dichloroethane	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	75-34-3	
1,2-Dichloroethane	**<0.69**	ug/m3	0.69	1.68		11/03/19 18:13	107-06-2	
1,1-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	75-35-4	
cis-1,2-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	156-59-2	
trans-1,2-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	156-60-5	
1,2-Dichloropropane	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	78-87-5	
cis-1,3-Dichloropropene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	10061-01-5	
trans-1,3-Dichloropropene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	10061-02-6	
Dichlorotetrafluoroethane	**<2.4**	ug/m3	2.4	1.68		11/03/19 18:13	76-14-2	
Ethanol	**3.6**	ug/m3	3.2	1.68		11/03/19 18:13	64-17-5	
Ethyl acetate	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	141-78-6	
Ethylbenzene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	100-41-4	
4-Ethyltoluene	**<4.2**	ug/m3	4.2	1.68		11/03/19 18:13	622-96-8	
n-Heptane	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	142-82-5	
Hexachloro-1,3-butadiene	**<9.1**	ug/m3	9.1	1.68		11/03/19 18:13	87-68-3	
n-Hexane	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	110-54-3	
2-Hexanone	**<7.0**	ug/m3	7.0	1.68		11/03/19 18:13	591-78-6	
Methylene Chloride	**16.5**	ug/m3	5.9	1.68		11/03/19 18:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<7.0**	ug/m3	7.0	1.68		11/03/19 18:13	108-10-1	
Methyl-tert-butyl ether	**<6.1**	ug/m3	6.1	1.68		11/03/19 18:13	1634-04-4	
Naphthalene	**<4.5**	ug/m3	4.5	1.68		11/03/19 18:13	91-20-3	
2-Propanol	**<4.2**	ug/m3	4.2	1.68		11/03/19 18:13	67-63-0	
Propylene	**<0.59**	ug/m3	0.59	1.68		11/03/19 18:13	115-07-1	
Styrene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	79-34-5	

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ANALYTICAL RESULTS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Sample: SOUTHERN RES OUTDR AMBIENT AIR **Lab ID: 70109449003** Collected: 10/23/19 10:15 Received: 10/23/19 12:51 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	127-18-4	
Tetrahydrofuran	**<1.0**	ug/m3	1.0	1.68		11/03/19 18:13	109-99-9	
Toluene	**1.8**	ug/m3	1.3	1.68		11/03/19 18:13	108-88-3	
1,2,4-Trichlorobenzene	**<12.7**	ug/m3	12.7	1.68		11/03/19 18:13	120-82-1	
1,1,1-Trichloroethane	**<1.9**	ug/m3	1.9	1.68		11/03/19 18:13	71-55-6	
1,1,2-Trichloroethane	**<0.93**	ug/m3	0.93	1.68		11/03/19 18:13	79-00-5	
Trichloroethene	**<0.92**	ug/m3	0.92	1.68		11/03/19 18:13	79-01-6	
Trichlorofluoromethane	**<1.9**	ug/m3	1.9	1.68		11/03/19 18:13	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.6**	ug/m3	2.6	1.68		11/03/19 18:13	76-13-1	
1,2,4-Trimethylbenzene	**<1.7**	ug/m3	1.7	1.68		11/03/19 18:13	95-63-6	
1,3,5-Trimethylbenzene	**<1.7**	ug/m3	1.7	1.68		11/03/19 18:13	108-67-8	
Vinyl acetate	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	108-05-4	
Vinyl chloride	**<0.44**	ug/m3	0.44	1.68		11/03/19 18:13	75-01-4	
m&p-Xylene	**<3.0**	ug/m3	3.0	1.68		11/03/19 18:13	179601-23-1	
o-Xylene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	95-47-6	

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QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

QC Batch: 642603 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 70109449001, 70109449002, 70109449003

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109449001, 70109449002, 70109449003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.56	0.56	11/03/19 10:03	
1,1,2,2-Tetrachloroethane	ug/m3	<0.35	0.35	11/03/19 10:03	
1,1,2-Trichloroethane	ug/m3	<0.28	0.28	11/03/19 10:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.78	0.78	11/03/19 10:03	
1,1-Dichloroethane	ug/m3	<0.41	0.41	11/03/19 10:03	
1,1-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
1,2,4-Trichlorobenzene	ug/m3	<3.8	3.8	11/03/19 10:03	
1,2,4-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,2-Dibromoethane (EDB)	ug/m3	<0.39	0.39	11/03/19 10:03	
1,2-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,2-Dichloroethane	ug/m3	<0.21	0.21	11/03/19 10:03	
1,2-Dichloropropane	ug/m3	<0.47	0.47	11/03/19 10:03	
1,3,5-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,3-Butadiene	ug/m3	<0.22	0.22	11/03/19 10:03	
1,3-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,4-Dichlorobenzene	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Butanone (MEK)	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Hexanone	ug/m3	<2.1	2.1	11/03/19 10:03	
2-Propanol	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Ethyltoluene	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	<2.1	2.1	11/03/19 10:03	
Acetone	ug/m3	<1.2	1.2	11/03/19 10:03	
Benzene	ug/m3	<0.16	0.16	11/03/19 10:03	
Benzyl chloride	ug/m3	<1.3	1.3	11/03/19 10:03	
Bromodichloromethane	ug/m3	<0.68	0.68	11/03/19 10:03	
Bromoform	ug/m3	<2.6	2.6	11/03/19 10:03	
Bromomethane	ug/m3	<0.39	0.39	11/03/19 10:03	
Carbon disulfide	ug/m3	<0.32	0.32	11/03/19 10:03	
Carbon tetrachloride	ug/m3	<0.64	0.64	11/03/19 10:03	
Chlorobenzene	ug/m3	<0.47	0.47	11/03/19 10:03	
Chloroethane	ug/m3	<0.27	0.27	11/03/19 10:03	
Chloroform	ug/m3	<0.25	0.25	11/03/19 10:03	
Chloromethane	ug/m3	<0.21	0.21	11/03/19 10:03	
cis-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
cis-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Cyclohexane	ug/m3	<0.88	0.88	11/03/19 10:03	
Dibromochloromethane	ug/m3	<0.86	0.86	11/03/19 10:03	
Dichlorodifluoromethane	ug/m3	<0.50	0.50	11/03/19 10:03	
Dichlorotetrafluoroethane	ug/m3	<0.71	0.71	11/03/19 10:03	
Ethanol	ug/m3	<0.96	0.96	11/03/19 10:03	
Ethyl acetate	ug/m3	<0.37	0.37	11/03/19 10:03	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109449001, 70109449002, 70109449003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	<0.44	0.44	11/03/19 10:03	
Hexachloro-1,3-butadiene	ug/m3	<2.7	2.7	11/03/19 10:03	
m&p-Xylene	ug/m3	<0.88	0.88	11/03/19 10:03	
Methyl-tert-butyl ether	ug/m3	<1.8	1.8	11/03/19 10:03	
Methylene Chloride	ug/m3	<1.8	1.8	11/03/19 10:03	
n-Heptane	ug/m3	<0.42	0.42	11/03/19 10:03	
n-Hexane	ug/m3	<0.36	0.36	11/03/19 10:03	
Naphthalene	ug/m3	<1.3	1.3	11/03/19 10:03	
o-Xylene	ug/m3	<0.44	0.44	11/03/19 10:03	
Propylene	ug/m3	<0.18	0.18	11/03/19 10:03	
Styrene	ug/m3	<0.43	0.43	11/03/19 10:03	
Tetrachloroethene	ug/m3	<0.34	0.34	11/03/19 10:03	
Tetrahydrofuran	ug/m3	<0.30	0.30	11/03/19 10:03	
Toluene	ug/m3	<0.38	0.38	11/03/19 10:03	
trans-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
trans-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Trichloroethene	ug/m3	<0.27	0.27	11/03/19 10:03	
Trichlorofluoromethane	ug/m3	<0.57	0.57	11/03/19 10:03	
Vinyl acetate	ug/m3	<0.36	0.36	11/03/19 10:03	
Vinyl chloride	ug/m3	<0.13	0.13	11/03/19 10:03	

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	58.6	106	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	68.8	99	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	60.8	110	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	86.1	111	70-130	
1,1-Dichloroethane	ug/m3	41.1	41.7	101	70-130	
1,1-Dichloroethene	ug/m3	40.3	44.2	110	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	91.1	121	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	54.2	109	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	85.8	110	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	69.3	113	70-132	
1,2-Dichloroethane	ug/m3	41.1	42.5	103	70-130	
1,2-Dichloropropane	ug/m3	47	49.9	106	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	56.1	112	70-132	
1,3-Butadiene	ug/m3	22.5	26.6	118	65-130	
1,3-Dichlorobenzene	ug/m3	61.1	69.0	113	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	69.8	114	70-134	
2-Butanone (MEK)	ug/m3	30	32.6	109	70-130	
2-Hexanone	ug/m3	41.6	39.1	94	70-135	
2-Propanol	ug/m3	125	130	104	68-130	
4-Ethyltoluene	ug/m3	50	55.0	110	70-138	

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Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	40.5	97	70-131	
Acetone	ug/m3	121	125	103	67-130	
Benzene	ug/m3	32.5	33.1	102	70-130	
Benzyl chloride	ug/m3	52.6	50.4	96	70-130	
Bromodichloromethane	ug/m3	68.1	70.0	103	70-130	
Bromoform	ug/m3	105	116	110	70-132	
Bromomethane	ug/m3	39.5	46.0	117	69-130	
Carbon disulfide	ug/m3	31.6	36.1	114	56-137	
Carbon tetrachloride	ug/m3	64	65.0	102	66-131	
Chlorobenzene	ug/m3	46.8	50.2	107	70-130	
Chloroethane	ug/m3	26.8	32.6	122	70-130	
Chloroform	ug/m3	49.6	49.7	100	70-130	
Chloromethane	ug/m3	21	22.2	106	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	46.3	115	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	47.7	103	70-133	
Cyclohexane	ug/m3	35	37.7	108	68-132	
Dibromochloromethane	ug/m3	86.6	97.0	112	70-130	
Dichlorodifluoromethane	ug/m3	50.3	50.0	99	70-130	
Dichlorotetrafluoroethane	ug/m3	71	76.5	108	70-130	
Ethanol	ug/m3	95.8	99.6	104	68-133	
Ethyl acetate	ug/m3	36.6	36.8	100	69-130	
Ethylbenzene	ug/m3	44.1	47.4	107	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	142	131	66-137	CH
m&p-Xylene	ug/m3	88.3	96.7	110	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	43.6	119	70-130	
Methylene Chloride	ug/m3	177	173	98	65-130	
n-Heptane	ug/m3	41.7	43.4	104	65-130	
n-Hexane	ug/m3	35.8	35.1	98	66-130	
Naphthalene	ug/m3	53.3	48.3	91	56-130	
o-Xylene	ug/m3	44.1	47.7	108	70-130	
Propylene	ug/m3	17.5	17.5	100	67-130	
Styrene	ug/m3	43.3	46.7	108	69-136	
Tetrachloroethene	ug/m3	68.9	84.4	122	70-130	
Tetrahydrofuran	ug/m3	30	31.8	106	68-131	
Toluene	ug/m3	38.3	41.1	107	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	46.0	114	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	47.6	103	70-134	
Trichloroethene	ug/m3	54.6	66.0	121	70-130	
Trichlorofluoromethane	ug/m3	57.1	61.8	108	65-130	
Vinyl acetate	ug/m3	35.8	40.6	114	61-133	
Vinyl chloride	ug/m3	26	31.4	121	70-130	

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.5		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.94		
1,1,2-Trichloroethane	ug/m3	ND	<0.74		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.1		
1,1-Dichloroethane	ug/m3	ND	<1.1		
1,1-Dichloroethene	ug/m3	ND	<1.1		
1,2,4-Trichlorobenzene	ug/m3	ND	<10.1		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.3		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.0		
1,2-Dichlorobenzene	ug/m3	ND	<1.6		
1,2-Dichloroethane	ug/m3	ND	<0.55		
1,2-Dichloropropane	ug/m3	ND	<1.3		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.3		
1,3-Butadiene	ug/m3	ND	<0.60		
1,3-Dichlorobenzene	ug/m3	ND	<1.6		
1,4-Dichlorobenzene	ug/m3	ND	<4.1		
2-Butanone (MEK)	ug/m3	ND	<4.0		
2-Hexanone	ug/m3	ND	<5.6		
2-Propanol	ug/m3	ND	<3.4		
4-Ethyltoluene	ug/m3	ND	<3.4		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<5.6		
Acetone	ug/m3	5.2	5.1	2	
Benzene	ug/m3	0.47	0.44	6	
Benzyl chloride	ug/m3	ND	<3.5		
Bromodichloromethane	ug/m3	ND	<1.8		
Bromoform	ug/m3	ND	<7.0		
Bromomethane	ug/m3	ND	<1.1		
Carbon disulfide	ug/m3	ND	<0.85		
Carbon tetrachloride	ug/m3	ND	<1.7		
Chlorobenzene	ug/m3	ND	<1.3		
Chloroethane	ug/m3	ND	<0.72		
Chloroform	ug/m3	ND	<0.66		
Chloromethane	ug/m3	0.70	0.67	4	
cis-1,2-Dichloroethene	ug/m3	ND	<1.1		
cis-1,3-Dichloropropene	ug/m3	ND	<1.2		
Cyclohexane	ug/m3	ND	<2.3		
Dibromochloromethane	ug/m3	ND	<2.3		
Dichlorodifluoromethane	ug/m3	2.3	2.3	2	
Dichlorotetrafluoroethane	ug/m3	ND	<1.9		
Ethanol	ug/m3	ND	<2.6		
Ethyl acetate	ug/m3	ND	<0.98		
Ethylbenzene	ug/m3	ND	<1.2		
Hexachloro-1,3-butadiene	ug/m3	ND	<7.3		
m&p-Xylene	ug/m3	ND	<2.4		
Methyl-tert-butyl ether	ug/m3	ND	<4.9		
Methylene Chloride	ug/m3	ND	<4.7		
n-Heptane	ug/m3	ND	<1.1		

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
n-Hexane	ug/m3	ND	<0.96		
Naphthalene	ug/m3	ND	<3.6		
o-Xylene	ug/m3	ND	<1.2		
Propylene	ug/m3	ND	<0.47		
Styrene	ug/m3	ND	<1.2		
Tetrachloroethene	ug/m3	ND	<0.92		
Tetrahydrofuran	ug/m3	ND	<0.80		
Toluene	ug/m3	1.3	1.2	8	
trans-1,2-Dichloroethene	ug/m3	ND	<1.1		
trans-1,3-Dichloropropene	ug/m3	ND	<1.2		
Trichloroethene	ug/m3	ND	<0.73		
Trichlorofluoromethane	ug/m3	ND	<1.5		
Vinyl acetate	ug/m3	ND	<0.96		
Vinyl chloride	ug/m3	ND	<0.35		

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.8		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<1.1		
1,1,2-Trichloroethane	ug/m3	ND	<0.88		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.5		
1,1-Dichloroethane	ug/m3	ND	<1.3		
1,1-Dichloroethene	ug/m3	ND	<1.3		
1,2,4-Trichlorobenzene	ug/m3	ND	<11.9		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.6		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.2		
1,2-Dichlorobenzene	ug/m3	ND	<1.9		
1,2-Dichloroethane	ug/m3	ND	<0.65		
1,2-Dichloropropane	ug/m3	ND	<1.5		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.6		
1,3-Butadiene	ug/m3	ND	<0.71		
1,3-Dichlorobenzene	ug/m3	ND	<1.9		
1,4-Dichlorobenzene	ug/m3	ND	<4.8		
2-Butanone (MEK)	ug/m3	ND	<4.7		
2-Hexanone	ug/m3	ND	<6.6		
2-Propanol	ug/m3	ND	<4.0		
4-Ethyltoluene	ug/m3	ND	<4.0		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<6.6		
Acetone	ug/m3	15.7	15.8	1	
Benzene	ug/m3	1.5	1.5	1	
Benzyl chloride	ug/m3	ND	<4.2		
Bromodichloromethane	ug/m3	ND	<2.1		
Bromoform	ug/m3	ND	<8.3		
Bromomethane	ug/m3	ND	<1.2		

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QUALITY CONTROL DATA

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
Carbon disulfide	ug/m3	ND	<1.0		
Carbon tetrachloride	ug/m3	ND	<2.0		
Chlorobenzene	ug/m3	ND	<1.5		
Chloroethane	ug/m3	ND	<0.85		
Chloroform	ug/m3	ND	<0.78		
Chloromethane	ug/m3	ND	0.81		
cis-1,2-Dichloroethene	ug/m3	ND	<1.3		
cis-1,3-Dichloropropene	ug/m3	ND	<1.5		
Cyclohexane	ug/m3	ND	<2.8		
Dibromochloromethane	ug/m3	ND	<2.7		
Dichlorodifluoromethane	ug/m3	2.4	2.4	2	
Dichlorotetrafluoroethane	ug/m3	ND	<2.2		
Ethanol	ug/m3	ND	<3.0		
Ethyl acetate	ug/m3	ND	<1.2		
Ethylbenzene	ug/m3	ND	<1.4		
Hexachloro-1,3-butadiene	ug/m3	ND	<8.6		
m&p-Xylene	ug/m3	ND	<2.8		
Methyl-tert-butyl ether	ug/m3	ND	<5.8		
Methylene Chloride	ug/m3	5.7	5.8	2	
n-Heptane	ug/m3	ND	<1.3		
n-Hexane	ug/m3	ND	<1.1		
Naphthalene	ug/m3	ND	<4.2		
o-Xylene	ug/m3	ND	<1.4		
Propylene	ug/m3	ND	<0.55		
Styrene	ug/m3	ND	<1.4		
Tetrachloroethene	ug/m3	ND	<1.1		
Tetrahydrofuran	ug/m3	ND	<0.95		
Toluene	ug/m3	1.5	1.5	1	
trans-1,2-Dichloroethene	ug/m3	ND	<1.3		
trans-1,3-Dichloropropene	ug/m3	ND	<1.5		
Trichloroethene	ug/m3	ND	<0.86		
Trichlorofluoromethane	ug/m3	ND	<1.8		
Vinyl acetate	ug/m3	ND	<1.1		
Vinyl chloride	ug/m3	ND	<0.41		

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALIFIERS

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.

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575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 3 SEVENTEETH ST SOUTHERN RES
Pace Project No.: 70109449

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70109449001	**SOUTHERN ADJ RESIDENCE SUBSLAB**	TO-15	642603		
70109449002	**SOUTHERN RES INDR AMBIENT AIR**	TO-15	642603		
70109449003	**SOUTHERN RES OUTDR AMBIENT AIR**	TO-15	642603		

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AIR: CHAIN-OF-CUS

The Chain-of-Custody is a LEGAL DOCUMEN

WO# : 70109449

70109449

Page: 1 of 1

Section A
Required Client Information:

Company: Cashin Associates
Address: 1200 Veterans Memorial Hwy
Hauppauge NY 11788
Email To: MCalifano@ca-pc.com
Phone: 631-348-7600 Fax: 631-348-7601
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Cashin Associates
Copy To: Thomas Ryan
Marc Califano
Purchase Order No.:
Project Name: 3 Seventeenth St, Southern Residence
Project Number: 13 CTS 030 T7

Section C
Invoice Information:

Attention: Thomas Ryan
Company Name: Bayville Cleaners
Address: 19 Todd Dr. Glen Head NY 11545
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 38414

Program
☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act
☑ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units
ug/m³ mg/m³
PPBV PPMV
Other

Report Level II. III. IV. Other

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	'Section D Required Client Information / AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Southern Adj. Residence Subslab	6LC		10-22-19	10:03	10-23-19	10:18	-30	-3	3592	1251					✓					
2	Southern Residence Indoor Ambient Air	6LC		10-22-19	10:08	10-23-19	10:17	-29	-4	2153	0236					✓					
3	Southern Residence Outdoor Ambient Air	6LC		10-22-19	10:13	10-23-19	10:15	-30	-7	2357	0238					✓					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Marc Califano CASHIN	10/23/19	12:50	DAY PACEL	10/23/19	10:51

SAMPLE CONDITIONS

Temp in °C	Received on Ice Y/N	Custody Sealed Cooler Y/N	Samples Intact Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARC CALIFANO CASHIN

SIGNATURE of SAMPLER: Marc Califano DATE Signed (MM / DD / YY): 10/23/19

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

Pace Analytical*

Sample Condition Upon R

WO#:70109449
PM: STS Due Date: 11/06/19
CLIENT: CAS-ECO

Client Name: CAS-ECO

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No Temperature Blank Present: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other Type of Ice: Wet Blue (None)

Thermometer Used: TH091 Correction Factor: +0.2 ☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): N/A Cooler Temperature Corrected (°C): N/A Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample) Date and Initials of person examining contents: JK 10/28/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/Analysis Matrix SL WT OIL (AIR)				
All containers needing preservation have been checked	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water) Per Method, VOA pH is checked after analysis	☐ Yes	☐ No	☑ N/A	Sample #
				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #				
Residual chlorine strips Lot #				Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☐ No	☑ N/A	15.
Trip Blank Present:	☐ Yes	☐ No	☐ N/A	16.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

November 05, 2019

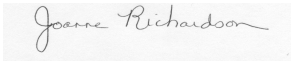
Sophia Sparkes
Pace Analytical Services
575 Broad Hollow Road
Melville, NY 11747

RE: Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Dear Sophia Sparkes:
Enclosed are the analytical results for sample(s) received by the laboratory on October 24, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Joanne M Richardson
joanne.richardson@pacelabs.com
1(612)607-6453
Project Manager

Enclosures

Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

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SAMPLE ANALYTE COUNT

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70109449001	**SOUTHERN ADJ RESIDENCE SUBSLAB**	TO-15	MJL	61	PASI-M
70109449002	**SOUTHERN RES INDR AMBIENT AIR**	TO-15	MJL	61	PASI-M
70109449003	**SOUTHERN RES OUTDR AMBIENT AIR**	TO-15	MJL	61	PASI-M

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN ADJ RESIDENCE SUBSLAB **Lab ID: 70109449001** Collected: 10/23/19 10:18 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**163**	ug/m3	3.5	1.46		11/03/19 17:15	67-64-1	
Benzene	**0.81**	ug/m3	0.47	1.46		11/03/19 17:15	71-43-2	
Benzyl chloride	**<3.8**	ug/m3	3.8	1.46		11/03/19 17:15	100-44-7	
Bromodichloromethane	**<2.0**	ug/m3	2.0	1.46		11/03/19 17:15	75-27-4	
Bromoform	**<7.7**	ug/m3	7.7	1.46		11/03/19 17:15	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	74-83-9	
1,3-Butadiene	**<0.66**	ug/m3	0.66	1.46		11/03/19 17:15	106-99-0	
2-Butanone (MEK)	**6.8**	ug/m3	4.4	1.46		11/03/19 17:15	78-93-3	
Carbon disulfide	**<0.92**	ug/m3	0.92	1.46		11/03/19 17:15	75-15-0	
Carbon tetrachloride	**<1.9**	ug/m3	1.9	1.46		11/03/19 17:15	56-23-5	
Chlorobenzene	**<1.4**	ug/m3	1.4	1.46		11/03/19 17:15	108-90-7	
Chloroethane	**<0.78**	ug/m3	0.78	1.46		11/03/19 17:15	75-00-3	
Chloroform	**2.4**	ug/m3	0.72	1.46		11/03/19 17:15	67-66-3	
Chloromethane	**<0.61**	ug/m3	0.61	1.46		11/03/19 17:15	74-87-3	
Cyclohexane	**<2.6**	ug/m3	2.6	1.46		11/03/19 17:15	110-82-7	
Dibromochloromethane	**<2.5**	ug/m3	2.5	1.46		11/03/19 17:15	124-48-1	
1,2-Dibromoethane (EDB)	**<1.1**	ug/m3	1.1	1.46		11/03/19 17:15	106-93-4	
1,2-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.46		11/03/19 17:15	95-50-1	
1,3-Dichlorobenzene	**<1.8**	ug/m3	1.8	1.46		11/03/19 17:15	541-73-1	
1,4-Dichlorobenzene	**<4.5**	ug/m3	4.5	1.46		11/03/19 17:15	106-46-7	
Dichlorodifluoromethane	**266**	ug/m3	7.4	7.3		11/04/19 17:06	75-71-8	
1,1-Dichloroethane	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	75-34-3	
1,2-Dichloroethane	**5.3**	ug/m3	0.60	1.46		11/03/19 17:15	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	75-35-4	
cis-1,2-Dichloroethene	**3.5**	ug/m3	1.2	1.46		11/03/19 17:15	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.46		11/03/19 17:15	156-60-5	
1,2-Dichloropropane	**<1.4**	ug/m3	1.4	1.46		11/03/19 17:15	78-87-5	
cis-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	10061-01-5	
trans-1,3-Dichloropropene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	10061-02-6	
Dichlorotetrafluoroethane	**<2.1**	ug/m3	2.1	1.46		11/03/19 17:15	76-14-2	
Ethanol	**771**	ug/m3	14.0	7.3		11/04/19 17:06	64-17-5	
Ethyl acetate	**14.5**	ug/m3	1.1	1.46		11/03/19 17:15	141-78-6	
Ethylbenzene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	100-41-4	
4-Ethyltoluene	**<3.6**	ug/m3	3.6	1.46		11/03/19 17:15	622-96-8	
n-Heptane	**18.0**	ug/m3	1.2	1.46		11/03/19 17:15	142-82-5	
Hexachloro-1,3-butadiene	**<7.9**	ug/m3	7.9	1.46		11/03/19 17:15	87-68-3	
n-Hexane	**1.6**	ug/m3	1.0	1.46		11/03/19 17:15	110-54-3	
2-Hexanone	**<6.1**	ug/m3	6.1	1.46		11/03/19 17:15	591-78-6	
Methylene Chloride	**<5.2**	ug/m3	5.2	1.46		11/03/19 17:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.1**	ug/m3	6.1	1.46		11/03/19 17:15	108-10-1	
Methyl-tert-butyl ether	**<5.3**	ug/m3	5.3	1.46		11/03/19 17:15	1634-04-4	
Naphthalene	**<3.9**	ug/m3	3.9	1.46		11/03/19 17:15	91-20-3	
2-Propanol	**357**	ug/m3	3.6	1.46		11/03/19 17:15	67-63-0	
Propylene	**<0.51**	ug/m3	0.51	1.46		11/03/19 17:15	115-07-1	
Styrene	**1.6**	ug/m3	1.3	1.46		11/03/19 17:15	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/m3	1.0	1.46		11/03/19 17:15	79-34-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN ADJ RESIDENCE SUBSLAB **Lab ID: 70109449001** Collected: 10/23/19 10:18 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**10.3**	ug/m3	1.0	1.46		11/03/19 17:15	127-18-4	
Tetrahydrofuran	**<0.88**	ug/m3	0.88	1.46		11/03/19 17:15	109-99-9	
Toluene	**3.7**	ug/m3	1.1	1.46		11/03/19 17:15	108-88-3	
1,2,4-Trichlorobenzene	**<11.0**	ug/m3	11.0	1.46		11/03/19 17:15	120-82-1	
1,1,1-Trichloroethane	**<1.6**	ug/m3	1.6	1.46		11/03/19 17:15	71-55-6	
1,1,2-Trichloroethane	**<0.81**	ug/m3	0.81	1.46		11/03/19 17:15	79-00-5	
Trichloroethene	**<0.80**	ug/m3	0.80	1.46		11/03/19 17:15	79-01-6	
Trichlorofluoromethane	**1.9**	ug/m3	1.7	1.46		11/03/19 17:15	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.3**	ug/m3	2.3	1.46		11/03/19 17:15	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.46		11/03/19 17:15	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.46		11/03/19 17:15	108-67-8	
Vinyl acetate	**<1.0**	ug/m3	1.0	1.46		11/03/19 17:15	108-05-4	
Vinyl chloride	**<0.38**	ug/m3	0.38	1.46		11/03/19 17:15	75-01-4	
m&p-Xylene	**<2.6**	ug/m3	2.6	1.46		11/03/19 17:15	179601-23-1	
o-Xylene	**<1.3**	ug/m3	1.3	1.46		11/03/19 17:15	95-47-6	

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Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN RES INDR AMBIENT AIR **Lab ID: 70109449002** Collected: 10/23/19 10:17 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**120**	ug/m3	3.7	1.55		11/03/19 17:44	67-64-1	
Benzene	**<0.50**	ug/m3	0.50	1.55		11/03/19 17:44	71-43-2	
Benzyl chloride	**<4.1**	ug/m3	4.1	1.55		11/03/19 17:44	100-44-7	
Bromodichloromethane	**<2.1**	ug/m3	2.1	1.55		11/03/19 17:44	75-27-4	
Bromoform	**<8.1**	ug/m3	8.1	1.55		11/03/19 17:44	75-25-2	
Bromomethane	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	74-83-9	
1,3-Butadiene	**<0.70**	ug/m3	0.70	1.55		11/03/19 17:44	106-99-0	
2-Butanone (MEK)	**4.7**	ug/m3	4.6	1.55		11/03/19 17:44	78-93-3	
Carbon disulfide	**<0.98**	ug/m3	0.98	1.55		11/03/19 17:44	75-15-0	
Carbon tetrachloride	**<2.0**	ug/m3	2.0	1.55		11/03/19 17:44	56-23-5	
Chlorobenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	108-90-7	
Chloroethane	**<0.83**	ug/m3	0.83	1.55		11/03/19 17:44	75-00-3	
Chloroform	**1.3**	ug/m3	0.77	1.55		11/03/19 17:44	67-66-3	
Chloromethane	**<0.65**	ug/m3	0.65	1.55		11/03/19 17:44	74-87-3	
Cyclohexane	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	110-82-7	
Dibromochloromethane	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	124-48-1	
1,2-Dibromoethane (EDB)	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	106-93-4	
1,2-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 17:44	95-50-1	
1,3-Dichlorobenzene	**<1.9**	ug/m3	1.9	1.55		11/03/19 17:44	541-73-1	
1,4-Dichlorobenzene	**<4.7**	ug/m3	4.7	1.55		11/03/19 17:44	106-46-7	
Dichlorodifluoromethane	**6.9**	ug/m3	1.6	1.55		11/03/19 17:44	75-71-8	
1,1-Dichloroethane	**<1.3**	ug/m3	1.3	1.55		11/03/19 17:44	75-34-3	
1,2-Dichloroethane	**6.2**	ug/m3	0.64	1.55		11/03/19 17:44	107-06-2	
1,1-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	75-35-4	
cis-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	156-59-2	
trans-1,2-Dichloroethene	**<1.2**	ug/m3	1.2	1.55		11/03/19 17:44	156-60-5	
1,2-Dichloropropane	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	78-87-5	
cis-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	10061-01-5	
trans-1,3-Dichloropropene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	10061-02-6	
Dichlorotetrafluoroethane	**<2.2**	ug/m3	2.2	1.55		11/03/19 17:44	76-14-2	
Ethanol	**698**	ug/m3	3.0	1.55		11/03/19 17:44	64-17-5	E
Ethyl acetate	**16.3**	ug/m3	1.1	1.55		11/03/19 17:44	141-78-6	
Ethylbenzene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	100-41-4	
4-Ethyltoluene	**<3.9**	ug/m3	3.9	1.55		11/03/19 17:44	622-96-8	
n-Heptane	**22.5**	ug/m3	1.3	1.55		11/03/19 17:44	142-82-5	
Hexachloro-1,3-butadiene	**<8.4**	ug/m3	8.4	1.55		11/03/19 17:44	87-68-3	
n-Hexane	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	110-54-3	
2-Hexanone	**<6.4**	ug/m3	6.4	1.55		11/03/19 17:44	591-78-6	
Methylene Chloride	**8.6**	ug/m3	5.5	1.55		11/03/19 17:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<6.4**	ug/m3	6.4	1.55		11/03/19 17:44	108-10-1	
Methyl-tert-butyl ether	**<5.7**	ug/m3	5.7	1.55		11/03/19 17:44	1634-04-4	
Naphthalene	**<4.1**	ug/m3	4.1	1.55		11/03/19 17:44	91-20-3	
2-Propanol	**419**	ug/m3	3.9	1.55		11/03/19 17:44	67-63-0	
Propylene	**<0.54**	ug/m3	0.54	1.55		11/03/19 17:44	115-07-1	
Styrene	**2.1**	ug/m3	1.3	1.55		11/03/19 17:44	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	79-34-5	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN RES INDR AMBIENT AIR **Lab ID: 70109449002** Collected: 10/23/19 10:17 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**7.7**	ug/m3	1.1	1.55		11/03/19 17:44	127-18-4	
Tetrahydrofuran	**<0.93**	ug/m3	0.93	1.55		11/03/19 17:44	109-99-9	
Toluene	**3.2**	ug/m3	1.2	1.55		11/03/19 17:44	108-88-3	
1,2,4-Trichlorobenzene	**<11.7**	ug/m3	11.7	1.55		11/03/19 17:44	120-82-1	
1,1,1-Trichloroethane	**<1.7**	ug/m3	1.7	1.55		11/03/19 17:44	71-55-6	
1,1,2-Trichloroethane	**<0.86**	ug/m3	0.86	1.55		11/03/19 17:44	79-00-5	
Trichloroethene	**<0.85**	ug/m3	0.85	1.55		11/03/19 17:44	79-01-6	
Trichlorofluoromethane	**1.8**	ug/m3	1.8	1.55		11/03/19 17:44	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.4**	ug/m3	2.4	1.55		11/03/19 17:44	76-13-1	
1,2,4-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	95-63-6	
1,3,5-Trimethylbenzene	**<1.5**	ug/m3	1.5	1.55		11/03/19 17:44	108-67-8	
Vinyl acetate	**<1.1**	ug/m3	1.1	1.55		11/03/19 17:44	108-05-4	
Vinyl chloride	**<0.40**	ug/m3	0.40	1.55		11/03/19 17:44	75-01-4	
m&p-Xylene	**<2.7**	ug/m3	2.7	1.55		11/03/19 17:44	179601-23-1	
o-Xylene	**<1.4**	ug/m3	1.4	1.55		11/03/19 17:44	95-47-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN RES OUTDR AMBIENT AIR **Lab ID: 70109449003** Collected: 10/23/19 10:15 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Acetone	**10.3**	ug/m3	4.0	1.68		11/03/19 18:13	67-64-1	
Benzene	**<0.55**	ug/m3	0.55	1.68		11/03/19 18:13	71-43-2	
Benzyl chloride	**<4.4**	ug/m3	4.4	1.68		11/03/19 18:13	100-44-7	
Bromodichloromethane	**<2.3**	ug/m3	2.3	1.68		11/03/19 18:13	75-27-4	
Bromoform	**<8.8**	ug/m3	8.8	1.68		11/03/19 18:13	75-25-2	
Bromomethane	**<1.3**	ug/m3	1.3	1.68		11/03/19 18:13	74-83-9	
1,3-Butadiene	**<0.76**	ug/m3	0.76	1.68		11/03/19 18:13	106-99-0	
2-Butanone (MEK)	**<5.0**	ug/m3	5.0	1.68		11/03/19 18:13	78-93-3	
Carbon disulfide	**<1.1**	ug/m3	1.1	1.68		11/03/19 18:13	75-15-0	
Carbon tetrachloride	**<2.2**	ug/m3	2.2	1.68		11/03/19 18:13	56-23-5	
Chlorobenzene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	108-90-7	
Chloroethane	**<0.90**	ug/m3	0.90	1.68		11/03/19 18:13	75-00-3	
Chloroform	**<0.83**	ug/m3	0.83	1.68		11/03/19 18:13	67-66-3	
Chloromethane	**<0.71**	ug/m3	0.71	1.68		11/03/19 18:13	74-87-3	
Cyclohexane	**<2.9**	ug/m3	2.9	1.68		11/03/19 18:13	110-82-7	
Dibromochloromethane	**<2.9**	ug/m3	2.9	1.68		11/03/19 18:13	124-48-1	
1,2-Dibromoethane (EDB)	**<1.3**	ug/m3	1.3	1.68		11/03/19 18:13	106-93-4	
1,2-Dichlorobenzene	**<2.0**	ug/m3	2.0	1.68		11/03/19 18:13	95-50-1	
1,3-Dichlorobenzene	**<2.0**	ug/m3	2.0	1.68		11/03/19 18:13	541-73-1	
1,4-Dichlorobenzene	**<5.1**	ug/m3	5.1	1.68		11/03/19 18:13	106-46-7	
Dichlorodifluoromethane	**2.4**	ug/m3	1.7	1.68		11/03/19 18:13	75-71-8	
1,1-Dichloroethane	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	75-34-3	
1,2-Dichloroethane	**<0.69**	ug/m3	0.69	1.68		11/03/19 18:13	107-06-2	
1,1-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	75-35-4	
cis-1,2-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	156-59-2	
trans-1,2-Dichloroethene	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	156-60-5	
1,2-Dichloropropane	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	78-87-5	
cis-1,3-Dichloropropene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	10061-01-5	
trans-1,3-Dichloropropene	**<1.6**	ug/m3	1.6	1.68		11/03/19 18:13	10061-02-6	
Dichlorotetrafluoroethane	**<2.4**	ug/m3	2.4	1.68		11/03/19 18:13	76-14-2	
Ethanol	**3.6**	ug/m3	3.2	1.68		11/03/19 18:13	64-17-5	
Ethyl acetate	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	141-78-6	
Ethylbenzene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	100-41-4	
4-Ethyltoluene	**<4.2**	ug/m3	4.2	1.68		11/03/19 18:13	622-96-8	
n-Heptane	**<1.4**	ug/m3	1.4	1.68		11/03/19 18:13	142-82-5	
Hexachloro-1,3-butadiene	**<9.1**	ug/m3	9.1	1.68		11/03/19 18:13	87-68-3	
n-Hexane	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	110-54-3	
2-Hexanone	**<7.0**	ug/m3	7.0	1.68		11/03/19 18:13	591-78-6	
Methylene Chloride	**16.5**	ug/m3	5.9	1.68		11/03/19 18:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**<7.0**	ug/m3	7.0	1.68		11/03/19 18:13	108-10-1	
Methyl-tert-butyl ether	**<6.1**	ug/m3	6.1	1.68		11/03/19 18:13	1634-04-4	
Naphthalene	**<4.5**	ug/m3	4.5	1.68		11/03/19 18:13	91-20-3	
2-Propanol	**<4.2**	ug/m3	4.2	1.68		11/03/19 18:13	67-63-0	
Propylene	**<0.59**	ug/m3	0.59	1.68		11/03/19 18:13	115-07-1	
Styrene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	100-42-5	
1,1,2,2-Tetrachloroethane	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	79-34-5	

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ANALYTICAL RESULTS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Sample: SOUTHERN RES OUTDR AMBIENT AIR **Lab ID: 70109449003** Collected: 10/23/19 10:15 Received: 10/24/19 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
Tetrachloroethene	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	127-18-4	
Tetrahydrofuran	**<1.0**	ug/m3	1.0	1.68		11/03/19 18:13	109-99-9	
Toluene	**1.8**	ug/m3	1.3	1.68		11/03/19 18:13	108-88-3	
1,2,4-Trichlorobenzene	**<12.7**	ug/m3	12.7	1.68		11/03/19 18:13	120-82-1	
1,1,1-Trichloroethane	**<1.9**	ug/m3	1.9	1.68		11/03/19 18:13	71-55-6	
1,1,2-Trichloroethane	**<0.93**	ug/m3	0.93	1.68		11/03/19 18:13	79-00-5	
Trichloroethene	**<0.92**	ug/m3	0.92	1.68		11/03/19 18:13	79-01-6	
Trichlorofluoromethane	**<1.9**	ug/m3	1.9	1.68		11/03/19 18:13	75-69-4	
1,1,2-Trichlorotrifluoroethane	**<2.6**	ug/m3	2.6	1.68		11/03/19 18:13	76-13-1	
1,2,4-Trimethylbenzene	**<1.7**	ug/m3	1.7	1.68		11/03/19 18:13	95-63-6	
1,3,5-Trimethylbenzene	**<1.7**	ug/m3	1.7	1.68		11/03/19 18:13	108-67-8	
Vinyl acetate	**<1.2**	ug/m3	1.2	1.68		11/03/19 18:13	108-05-4	
Vinyl chloride	**<0.44**	ug/m3	0.44	1.68		11/03/19 18:13	75-01-4	
m&p-Xylene	**<3.0**	ug/m3	3.0	1.68		11/03/19 18:13	179601-23-1	
o-Xylene	**<1.5**	ug/m3	1.5	1.68		11/03/19 18:13	95-47-6	

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QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

QC Batch: 642603 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 70109449001, 70109449002, 70109449003

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109449001, 70109449002, 70109449003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	<0.56	0.56	11/03/19 10:03	
1,1,2,2-Tetrachloroethane	ug/m3	<0.35	0.35	11/03/19 10:03	
1,1,2-Trichloroethane	ug/m3	<0.28	0.28	11/03/19 10:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	<0.78	0.78	11/03/19 10:03	
1,1-Dichloroethane	ug/m3	<0.41	0.41	11/03/19 10:03	
1,1-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
1,2,4-Trichlorobenzene	ug/m3	<3.8	3.8	11/03/19 10:03	
1,2,4-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,2-Dibromoethane (EDB)	ug/m3	<0.39	0.39	11/03/19 10:03	
1,2-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,2-Dichloroethane	ug/m3	<0.21	0.21	11/03/19 10:03	
1,2-Dichloropropane	ug/m3	<0.47	0.47	11/03/19 10:03	
1,3,5-Trimethylbenzene	ug/m3	<0.50	0.50	11/03/19 10:03	
1,3-Butadiene	ug/m3	<0.22	0.22	11/03/19 10:03	
1,3-Dichlorobenzene	ug/m3	<0.61	0.61	11/03/19 10:03	
1,4-Dichlorobenzene	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Butanone (MEK)	ug/m3	<1.5	1.5	11/03/19 10:03	
2-Hexanone	ug/m3	<2.1	2.1	11/03/19 10:03	
2-Propanol	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Ethyltoluene	ug/m3	<1.2	1.2	11/03/19 10:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	<2.1	2.1	11/03/19 10:03	
Acetone	ug/m3	<1.2	1.2	11/03/19 10:03	
Benzene	ug/m3	<0.16	0.16	11/03/19 10:03	
Benzyl chloride	ug/m3	<1.3	1.3	11/03/19 10:03	
Bromodichloromethane	ug/m3	<0.68	0.68	11/03/19 10:03	
Bromoform	ug/m3	<2.6	2.6	11/03/19 10:03	
Bromomethane	ug/m3	<0.39	0.39	11/03/19 10:03	
Carbon disulfide	ug/m3	<0.32	0.32	11/03/19 10:03	
Carbon tetrachloride	ug/m3	<0.64	0.64	11/03/19 10:03	
Chlorobenzene	ug/m3	<0.47	0.47	11/03/19 10:03	
Chloroethane	ug/m3	<0.27	0.27	11/03/19 10:03	
Chloroform	ug/m3	<0.25	0.25	11/03/19 10:03	
Chloromethane	ug/m3	<0.21	0.21	11/03/19 10:03	
cis-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
cis-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Cyclohexane	ug/m3	<0.88	0.88	11/03/19 10:03	
Dibromochloromethane	ug/m3	<0.86	0.86	11/03/19 10:03	
Dichlorodifluoromethane	ug/m3	<0.50	0.50	11/03/19 10:03	
Dichlorotetrafluoroethane	ug/m3	<0.71	0.71	11/03/19 10:03	
Ethanol	ug/m3	<0.96	0.96	11/03/19 10:03	
Ethyl acetate	ug/m3	<0.37	0.37	11/03/19 10:03	

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QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

METHOD BLANK: 3460707 Matrix: Air
Associated Lab Samples: 70109449001, 70109449002, 70109449003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/m3	<0.44	0.44	11/03/19 10:03	
Hexachloro-1,3-butadiene	ug/m3	<2.7	2.7	11/03/19 10:03	
m&p-Xylene	ug/m3	<0.88	0.88	11/03/19 10:03	
Methyl-tert-butyl ether	ug/m3	<1.8	1.8	11/03/19 10:03	
Methylene Chloride	ug/m3	<1.8	1.8	11/03/19 10:03	
n-Heptane	ug/m3	<0.42	0.42	11/03/19 10:03	
n-Hexane	ug/m3	<0.36	0.36	11/03/19 10:03	
Naphthalene	ug/m3	<1.3	1.3	11/03/19 10:03	
o-Xylene	ug/m3	<0.44	0.44	11/03/19 10:03	
Propylene	ug/m3	<0.18	0.18	11/03/19 10:03	
Styrene	ug/m3	<0.43	0.43	11/03/19 10:03	
Tetrachloroethene	ug/m3	<0.34	0.34	11/03/19 10:03	
Tetrahydrofuran	ug/m3	<0.30	0.30	11/03/19 10:03	
Toluene	ug/m3	<0.38	0.38	11/03/19 10:03	
trans-1,2-Dichloroethene	ug/m3	<0.40	0.40	11/03/19 10:03	
trans-1,3-Dichloropropene	ug/m3	<0.46	0.46	11/03/19 10:03	
Trichloroethene	ug/m3	<0.27	0.27	11/03/19 10:03	
Trichlorofluoromethane	ug/m3	<0.57	0.57	11/03/19 10:03	
Vinyl acetate	ug/m3	<0.36	0.36	11/03/19 10:03	
Vinyl chloride	ug/m3	<0.13	0.13	11/03/19 10:03	

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	58.6	106	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	68.8	99	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	60.8	110	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	86.1	111	70-130	
1,1-Dichloroethane	ug/m3	41.1	41.7	101	70-130	
1,1-Dichloroethene	ug/m3	40.3	44.2	110	70-130	
1,2,4-Trichlorobenzene	ug/m3	75.4	91.1	121	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	54.2	109	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	85.8	110	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	69.3	113	70-132	
1,2-Dichloroethane	ug/m3	41.1	42.5	103	70-130	
1,2-Dichloropropane	ug/m3	47	49.9	106	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	56.1	112	70-132	
1,3-Butadiene	ug/m3	22.5	26.6	118	65-130	
1,3-Dichlorobenzene	ug/m3	61.1	69.0	113	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	69.8	114	70-134	
2-Butanone (MEK)	ug/m3	30	32.6	109	70-130	
2-Hexanone	ug/m3	41.6	39.1	94	70-135	
2-Propanol	ug/m3	125	130	104	68-130	
4-Ethyltoluene	ug/m3	50	55.0	110	70-138	

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QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

LABORATORY CONTROL SAMPLE: 3460708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	40.5	97	70-131	
Acetone	ug/m3	121	125	103	67-130	
Benzene	ug/m3	32.5	33.1	102	70-130	
Benzyl chloride	ug/m3	52.6	50.4	96	70-130	
Bromodichloromethane	ug/m3	68.1	70.0	103	70-130	
Bromoform	ug/m3	105	116	110	70-132	
Bromomethane	ug/m3	39.5	46.0	117	69-130	
Carbon disulfide	ug/m3	31.6	36.1	114	56-137	
Carbon tetrachloride	ug/m3	64	65.0	102	66-131	
Chlorobenzene	ug/m3	46.8	50.2	107	70-130	
Chloroethane	ug/m3	26.8	32.6	122	70-130	
Chloroform	ug/m3	49.6	49.7	100	70-130	
Chloromethane	ug/m3	21	22.2	106	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	46.3	115	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	47.7	103	70-133	
Cyclohexane	ug/m3	35	37.7	108	68-132	
Dibromochloromethane	ug/m3	86.6	97.0	112	70-130	
Dichlorodifluoromethane	ug/m3	50.3	50.0	99	70-130	
Dichlorotetrafluoroethane	ug/m3	71	76.5	108	70-130	
Ethanol	ug/m3	95.8	99.6	104	68-133	
Ethyl acetate	ug/m3	36.6	36.8	100	69-130	
Ethylbenzene	ug/m3	44.1	47.4	107	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	142	131	66-137	CH
m&p-Xylene	ug/m3	88.3	96.7	110	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	43.6	119	70-130	
Methylene Chloride	ug/m3	177	173	98	65-130	
n-Heptane	ug/m3	41.7	43.4	104	65-130	
n-Hexane	ug/m3	35.8	35.1	98	66-130	
Naphthalene	ug/m3	53.3	48.3	91	56-130	
o-Xylene	ug/m3	44.1	47.7	108	70-130	
Propylene	ug/m3	17.5	17.5	100	67-130	
Styrene	ug/m3	43.3	46.7	108	69-136	
Tetrachloroethene	ug/m3	68.9	84.4	122	70-130	
Tetrahydrofuran	ug/m3	30	31.8	106	68-131	
Toluene	ug/m3	38.3	41.1	107	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	46.0	114	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	47.6	103	70-134	
Trichloroethene	ug/m3	54.6	66.0	121	70-130	
Trichlorofluoromethane	ug/m3	57.1	61.8	108	65-130	
Vinyl acetate	ug/m3	35.8	40.6	114	61-133	
Vinyl chloride	ug/m3	26	31.4	121	70-130	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.5		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<0.94		
1,1,2-Trichloroethane	ug/m3	ND	<0.74		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.1		
1,1-Dichloroethane	ug/m3	ND	<1.1		
1,1-Dichloroethene	ug/m3	ND	<1.1		
1,2,4-Trichlorobenzene	ug/m3	ND	<10.1		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.3		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.0		
1,2-Dichlorobenzene	ug/m3	ND	<1.6		
1,2-Dichloroethane	ug/m3	ND	<0.55		
1,2-Dichloropropane	ug/m3	ND	<1.3		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.3		
1,3-Butadiene	ug/m3	ND	<0.60		
1,3-Dichlorobenzene	ug/m3	ND	<1.6		
1,4-Dichlorobenzene	ug/m3	ND	<4.1		
2-Butanone (MEK)	ug/m3	ND	<4.0		
2-Hexanone	ug/m3	ND	<5.6		
2-Propanol	ug/m3	ND	<3.4		
4-Ethyltoluene	ug/m3	ND	<3.4		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<5.6		
Acetone	ug/m3	5.2	5.1	2	
Benzene	ug/m3	0.47	0.44	6	
Benzyl chloride	ug/m3	ND	<3.5		
Bromodichloromethane	ug/m3	ND	<1.8		
Bromoform	ug/m3	ND	<7.0		
Bromomethane	ug/m3	ND	<1.1		
Carbon disulfide	ug/m3	ND	<0.85		
Carbon tetrachloride	ug/m3	ND	<1.7		
Chlorobenzene	ug/m3	ND	<1.3		
Chloroethane	ug/m3	ND	<0.72		
Chloroform	ug/m3	ND	<0.66		
Chloromethane	ug/m3	0.70	0.67	4	
cis-1,2-Dichloroethene	ug/m3	ND	<1.1		
cis-1,3-Dichloropropene	ug/m3	ND	<1.2		
Cyclohexane	ug/m3	ND	<2.3		
Dibromochloromethane	ug/m3	ND	<2.3		
Dichlorodifluoromethane	ug/m3	2.3	2.3	2	
Dichlorotetrafluoroethane	ug/m3	ND	<1.9		
Ethanol	ug/m3	ND	<2.6		
Ethyl acetate	ug/m3	ND	<0.98		
Ethylbenzene	ug/m3	ND	<1.2		
Hexachloro-1,3-butadiene	ug/m3	ND	<7.3		
m&p-Xylene	ug/m3	ND	<2.4		
Methyl-tert-butyl ether	ug/m3	ND	<4.9		
Methylene Chloride	ug/m3	ND	<4.7		
n-Heptane	ug/m3	ND	<1.1		

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QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

SAMPLE DUPLICATE: 3461175

Parameter	Units	10496615001 Result	Dup Result	RPD	Qualifiers
n-Hexane	ug/m3	ND	<0.96		
Naphthalene	ug/m3	ND	<3.6		
o-Xylene	ug/m3	ND	<1.2		
Propylene	ug/m3	ND	<0.47		
Styrene	ug/m3	ND	<1.2		
Tetrachloroethene	ug/m3	ND	<0.92		
Tetrahydrofuran	ug/m3	ND	<0.80		
Toluene	ug/m3	1.3	1.2	8	
trans-1,2-Dichloroethene	ug/m3	ND	<1.1		
trans-1,3-Dichloropropene	ug/m3	ND	<1.2		
Trichloroethene	ug/m3	ND	<0.73		
Trichlorofluoromethane	ug/m3	ND	<1.5		
Vinyl acetate	ug/m3	ND	<0.96		
Vinyl chloride	ug/m3	ND	<0.35		

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	<1.8		
1,1,2,2-Tetrachloroethane	ug/m3	ND	<1.1		
1,1,2-Trichloroethane	ug/m3	ND	<0.88		
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	<2.5		
1,1-Dichloroethane	ug/m3	ND	<1.3		
1,1-Dichloroethene	ug/m3	ND	<1.3		
1,2,4-Trichlorobenzene	ug/m3	ND	<11.9		
1,2,4-Trimethylbenzene	ug/m3	ND	<1.6		
1,2-Dibromoethane (EDB)	ug/m3	ND	<1.2		
1,2-Dichlorobenzene	ug/m3	ND	<1.9		
1,2-Dichloroethane	ug/m3	ND	<0.65		
1,2-Dichloropropane	ug/m3	ND	<1.5		
1,3,5-Trimethylbenzene	ug/m3	ND	<1.6		
1,3-Butadiene	ug/m3	ND	<0.71		
1,3-Dichlorobenzene	ug/m3	ND	<1.9		
1,4-Dichlorobenzene	ug/m3	ND	<4.8		
2-Butanone (MEK)	ug/m3	ND	<4.7		
2-Hexanone	ug/m3	ND	<6.6		
2-Propanol	ug/m3	ND	<4.0		
4-Ethyltoluene	ug/m3	ND	<4.0		
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	<6.6		
Acetone	ug/m3	15.7	15.8	1	
Benzene	ug/m3	1.5	1.5	1	
Benzyl chloride	ug/m3	ND	<4.2		
Bromodichloromethane	ug/m3	ND	<2.1		
Bromoform	ug/m3	ND	<8.3		
Bromomethane	ug/m3	ND	<1.2		

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QUALITY CONTROL DATA

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

SAMPLE DUPLICATE: 3461176

Parameter	Units	10496615003 Result	Dup Result	RPD	Qualifiers
Carbon disulfide	ug/m3	ND	<1.0		
Carbon tetrachloride	ug/m3	ND	<2.0		
Chlorobenzene	ug/m3	ND	<1.5		
Chloroethane	ug/m3	ND	<0.85		
Chloroform	ug/m3	ND	<0.78		
Chloromethane	ug/m3	ND	0.81		
cis-1,2-Dichloroethene	ug/m3	ND	<1.3		
cis-1,3-Dichloropropene	ug/m3	ND	<1.5		
Cyclohexane	ug/m3	ND	<2.8		
Dibromochloromethane	ug/m3	ND	<2.7		
Dichlorodifluoromethane	ug/m3	2.4	2.4	2	
Dichlorotetrafluoroethane	ug/m3	ND	<2.2		
Ethanol	ug/m3	ND	<3.0		
Ethyl acetate	ug/m3	ND	<1.2		
Ethylbenzene	ug/m3	ND	<1.4		
Hexachloro-1,3-butadiene	ug/m3	ND	<8.6		
m&p-Xylene	ug/m3	ND	<2.8		
Methyl-tert-butyl ether	ug/m3	ND	<5.8		
Methylene Chloride	ug/m3	5.7	5.8	2	
n-Heptane	ug/m3	ND	<1.3		
n-Hexane	ug/m3	ND	<1.1		
Naphthalene	ug/m3	ND	<4.2		
o-Xylene	ug/m3	ND	<1.4		
Propylene	ug/m3	ND	<0.55		
Styrene	ug/m3	ND	<1.4		
Tetrachloroethene	ug/m3	ND	<1.1		
Tetrahydrofuran	ug/m3	ND	<0.95		
Toluene	ug/m3	1.5	1.5	1	
trans-1,2-Dichloroethene	ug/m3	ND	<1.3		
trans-1,3-Dichloropropene	ug/m3	ND	<1.5		
Trichloroethene	ug/m3	ND	<0.86		
Trichlorofluoromethane	ug/m3	ND	<1.8		
Vinyl acetate	ug/m3	ND	<1.1		
Vinyl chloride	ug/m3	ND	<0.41		

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 70109449 Cashin Associates
Pace Project No.: 10496822

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70109449001	**SOUTHERN ADJ RESIDENCE SUBSLAB**	TO-15	642603		
70109449002	**SOUTHERN RES INDR AMBIENT AIR**	TO-15	642603		
70109449003	**SOUTHERN RES OUTDR AMBIENT AIR**	TO-15	642603		

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WO# : 10496822

10496822

...ere sent directly to the Subcontracting Laboratory.

State Of Origin: NY

Cert. Needed: ☐ Yes ☐ No

...er: 70109449 **Workorder Name:** 3 SEVENTEETH ST SOUTHERN RES **Owner Received Date:** 10/23/2019 **Results Requested By:** 11/6/2019

...rt To	Subcontract To
Sophia Sparkes Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040	Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: Other	TO-15 Full list VOCs	LAB USE ONLY
1	SOUTHERN ADJ RESIDENCE SUBSLAB	PS	10/23/2019 10:18	70109449001	Air	1	X	001
2	SOUTHERN RES INDR AMBIENT AIR	PS	10/23/2019 10:17	70109449002	Air	1	X	002
3	SOUTHERN RES OUTDR AMBIENT AIR	PS	10/23/2019 10:15	70109449003	Air	1	X	003
4								
5								

Requested Analysis

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	10/23/19 18[illegible]	[signature] PACE	10/24/19 130
2				
3				

Cooler Temperature on Receipt ___ °C | **Custody Seal** Y or (N) | **Received on Ice** Y or (N) | **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace Analytical®
www.pacelabs.com

AIR: CHAIN-OF-CUS

The Chain-of-Custody is a LEGAL DOCUMEN

WO#:70109449



Page 1 of 1

Section A
Required Client Information:

Company: Cashin Associates
Address: 1200 Veterans Memorial Hwy
Hauppauge NY 11788
Email To: MCalifano@ca-pc.com
Phone: 631-348-7600 Fax: 631-348-7601
Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Cashin Associates
Copy To: Thomas Ryan
Marc Califano
Purchase Order No.:
Project Name: 3 seventeenth st, Southern residence
Project Number: 13 CTS 030T7

Section C
Invoice Information:

Attention: Thomas Ryan
Company Name: Bayville Cleaners
Address: 19 Todd Dr Glen Head NY
Pace Quote Reference: 11545
Pace Project Manager/Sales Rep.
Pace Profile #: 38414

Program
☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act
☑ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units
ug/m³ mg/m³
PPBV PPMV
Other

Report Level II. III. IV. Other

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Southern Adj. Residence Subslab	6LC		10-22-19	10:03	10-23-19	10:18	-30	-3	3592	1251					✓					
2	Southern Residence Indoor Ambient Air	6LC		10-22-19	10:08	10-23-19	10:17	-29	-4	2153	0236					✓					
3	Southern Residence Outdoor Ambient Air	6LC		10-22-19	10:13	10-23-19	10:15	-30	-7	2359	0238					✓					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Marc Califano CASHIN	10/23/19	12:50	Pace	10/23/19	10:51

SAMPLE CONDITIONS

	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARC CALIFANO CASHIN

SIGNATURE of SAMPLER: Marc Califano DATE Signed (MM / DD / YY): 10/23/19

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

Pace Analytical

Sample Condition Upon Receipt

WO#: 70109449
PM: STS Due Date: 11/06/19
CLIENT: CAS-ECO

Client Name: CAS-ECO

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No

Temperature Blank Present: ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☑ None ☐ Other

Type of Ice: Wet Blue (None)

Thermometer Used: TH091 Correction Factor: +0.2

☐ Samples on ice, cooling process has begun

Cooler Temperature (°C): N/A Cooler Temperature Corrected (°C): N/A

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☑ N/A, water sample)

Date and Initials of person examining contents: JK 10/23/19

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ YES ☐ NO

Did samples orignate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☒ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑Yes	☐No		1.
Chain of Custody Filled Out:	☑Yes	☐No		2.
Chain of Custody Relinquished:	☑Yes	☐No		3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No		5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No		6.
Rush Turn Around Time Requested:	☐Yes	☑No		7.
Sufficient Volume: (Triple volume provided for MS/MSD)	☑Yes	☐No		8.
Correct Containers Used:	☑Yes	☐No		9.
-Pace Containers Used:	☑Yes	☐No		
Containers Intact:	☑Yes	☐No		10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix SL WT OIL (AIR)	☑Yes	☐No		12.
All containers needing preservation have been checked pH paper Lot #	☐Yes	☐No	☑N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	☐Yes	☐No	☑N/A	Sample #
				Initial when completed: / Lot # of added preservative: / Date/Time preservative added
Samples checked for dechlorination: KI starch test strips Lot # Residual chlorine strips Lot #	☐Yes	☐No	☑N/A	14. Positive for Res. Chlorine? Y N
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

Pace Analytical®	Document Name: Air Sample Condition Upon Receipt	Document Revised: 14Oct2019 Page 1 of 1
	Document No.: F-MN-A-106-rev.19	Issuing Authority:

Air Sample Condition Upon Receipt

Client Name: PACE - NY

Project #:

WO#: 10496822

PM: JMR **Due Date: 11/07/19**

CLIENT: PASI-LINY

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial **See Exception** ☒

Tracking Number:

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other: **Temp Blank rec:** ☐ Yes ☒ No

Temp. (TO17 and TO13 samples only) (°C): X **Corrected Temp (°C):** X **Thermometer Used:** ☐ G87A9170600254 ☐ G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** X **Date & Initials of Person Examining Contents:** 10/24/19 CMY

Type of ice Received ☐ Blue ☐ Wet ☒ None

		Comments:
Chain of Custody Present?	☒ Yes ☐ No	1.
Chain of Custody Filled Out?	☒ Yes ☐ No	2.
Chain of Custody Relinquished?	☒ Yes ☐ No	3.
Sampler Name and/or Signature on COC?	☐ Yes ☐ No ☒ N/A	4.
Samples Arrived within Hold Time?	☒ Yes ☐ No	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes ☒ No	6.
Rush Turn Around Time Requested?	☐ Yes ☒ No	7.
Sufficient Volume?	☒ Yes ☐ No	8.
Correct Containers Used?	☒ Yes ☐ No	9.
-Pace Containers Used?	☒ Yes ☐ No	
Containers Intact?	☒ Yes ☐ No	10.
Media: (Air Can) Airbag Filter TDT Passive		11. Individually Certified Cans Y (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes ☐ No	12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒ Yes ☐ No	13.

Gauge # ☒ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☐ 4097

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
ADJ	3592	1251	-2.5	+5					
RES INDR	2153	0236	-4	+5					
RES OUTDR	2359	0238	-6	+5					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Joanne Richardson **Date:** 10-24-19

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical®	Document Name: SCUR Exception Form – Coolers Above 6°C	Document Revised: 08Apr2019 Page 1 of 1
	Document No.: F-MN-C-298-Rev.02	Issuing Authority: Pace Minnesota Quality Office

During sample triage, this form is to be placed in each cooler that arrives above 6.0 degrees Celsius

SCUR Exceptions: **Workorder #:**10496822

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank

Read Temp	Corrected Temp	Average Temp

Tracking Number/Temperature

1269 2021 1252	
1269 2021 1241	
1269 2021 1263	
10/24/19 CMY ~~124~~	
1269 2021 1274	

Other Issues

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Lab Sample No: 70109449001 ProjSampleNum: 70109449001 Date Collected: 10/23/19 10:18
Client Sample ID: SOUTHERN ADJ RESIDENCE SU Matrix: Air Date Received: 10/24/19 9:30

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
Air								
TO-15								
1,1,1-Trichloroethane	1.6	<1.6	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1	<1.0	0.00014	<0.00014	1.46	11/03/19 17:15	MJL	79-34-5
1,1,2-Trichloroethane	0.81	<0.81	0.00015	<0.00015	1.46	11/03/19 17:15	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.3	<2.3	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	76-13-1
1,1-Dichloroethane	1.2	<1.2	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	75-35-4
1,2,4-Trichlorobenzene	11	<11.0	0.0015	<0.0015	1.46	11/03/19 17:15	MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.1	<1.1	0.00014	<0.00014	1.46	11/03/19 17:15	MJL	106-93-4
1,2-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	95-50-1
1,2-Dichloroethane	0.6	5.3	0.00015	0.0013	1.46	11/03/19 17:15	MJL	107-06-2
1,2-Dichloropropane	1.4	<1.4	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	108-67-8
1,3-Butadiene	0.66	<0.66	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	106-99-0
1,3-Dichlorobenzene	1.8	<1.8	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	541-73-1
1,4-Dichlorobenzene	4.5	<4.5	0.00074	<0.00074	1.46	11/03/19 17:15	MJL	106-46-7
2-Butanone (MEK)	4.4	6.8	0.0015	0.0023	1.46	11/03/19 17:15	MJL	78-93-3
2-Hexanone	6.1	<6.1	0.0015	<0.0015	1.46	11/03/19 17:15	MJL	591-78-6
2-Propanol	3.6	357	0.0014	0.14	1.46	11/03/19 17:15	MJL	67-63-0
4-Ethyltoluene	3.6	<3.6	0.00072	<0.00072	1.46	11/03/19 17:15	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.1	<6.1	0.0015	<0.0015	1.46	11/03/19 17:15	MJL	108-10-1
Acetone	3.5	163	0.0014	0.068	1.46	11/03/19 17:15	MJL	67-64-1
Benzene	0.47	0.81	0.00014	0.00025	1.46	11/03/19 17:15	MJL	71-43-2
Benzyl chloride	3.8	<3.8	0.00072	<0.00072	1.46	11/03/19 17:15	MJL	100-44-7
Bromodichloromethane	2	<2.0	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	75-27-4
Bromoform	7.7	<7.7	0.00073	<0.00073	1.46	11/03/19 17:15	MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	74-83-9
Carbon disulfide	0.92	<0.92	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	75-15-0
Carbon tetrachloride	1.9	<1.9	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	56-23-5
Chlorobenzene	1.4	<1.4	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	108-90-7
Chloroethane	0.78	<0.78	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	75-00-3
Chloroform	0.72	2.4	0.00015	0.00048	1.46	11/03/19 17:15	MJL	67-66-3
Chloromethane	0.61	<0.61	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	3.5	0.0003	0.00087	1.46	11/03/19 17:15	MJL	156-59-2
cis-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.46	11/03/19 17:15	MJL	10061-01-5
Cyclohexane	2.6	<2.6	0.00074	<0.00074	1.46	11/03/19 17:15	MJL	110-82-7
Dibromochloromethane	2.5	<2.5	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	124-48-1
Dichlorodifluoromethane	7.4	266	0.0015	0.053	7.3	11/04/19 17:06	MJL	75-71-8
Dichlorotetrafluoroethane	2.1	<2.1	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	76-14-2
Ethanol	14	771	0.0073	0.4	7.3	11/04/19 17:06	MJL	64-17-5
Ethyl acetate	1.1	14.5	0.0003	0.004	1.46	11/03/19 17:15	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Ethylbenzene	1.3	<1.3	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	100-41-4
Hexachloro-1,3-butadiene	7.9	<7.9	0.00073	<0.00073	1.46	11/03/19 17:15	MJL	87-68-3
m&p-Xylene	2.6	<2.6	0.00059	<0.00059	1.46	11/03/19 17:15	MJL	179601-23-1
Methylene Chloride	5.2	<5.2	0.0015	<0.0015	1.46	11/03/19 17:15	MJL	75-09-2
Methyl-tert-butyl ether	5.3	<5.3	0.0014	<0.0014	1.46	11/03/19 17:15	MJL	1634-04-4
Naphthalene	3.9	<3.9	0.00073	<0.00073	1.46	11/03/19 17:15	MJL	91-20-3
n-Heptane	1.2	18.0	0.00029	0.0043	1.46	11/03/19 17:15	MJL	142-82-5
n-Hexane	1	1.6	0.00028	0.00045	1.46	11/03/19 17:15	MJL	110-54-3
o-Xylene	1.3	<1.3	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	95-47-6
Propylene	0.51	<0.51	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	115-07-1
Styrene	1.3	1.6	0.0003	0.00037	1.46	11/03/19 17:15	MJL	100-42-5
Tetrachloroethene	1	10.3	0.00015	0.0015	1.46	11/03/19 17:15	MJL	127-18-4
Tetrahydrofuran	0.88	<0.88	0.00029	<0.00029	1.46	11/03/19 17:15	MJL	109-99-9
Toluene	1.1	3.7	0.00029	0.00097	1.46	11/03/19 17:15	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.46	11/03/19 17:15	MJL	156-60-5
trans-1,3-Dichloropropene	1.3	<1.3	0.00028	<0.00028	1.46	11/03/19 17:15	MJL	10061-02-6
Trichloroethene	0.8	<0.80	0.00015	<0.00015	1.46	11/03/19 17:15	MJL	79-01-6
Trichlorofluoromethane	1.7	1.9	0.0003	0.00033	1.46	11/03/19 17:15	MJL	75-69-4
Vinyl acetate	1	<1.0	0.00028	<0.00028	1.46	11/03/19 17:15	MJL	108-05-4
Vinyl chloride	0.38	<0.38	0.00015	<0.00015	1.46	11/03/19 17:15	MJL	75-01-4

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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Lab Sample No: 70109449002 ProjSampleNum: 70109449002 Date Collected: 10/23/19 10:17
Client Sample ID: SOUTHERN RES INDR AMBIENT Matrix: Air Date Received: 10/24/19 9:30

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
Air								
TO-15								
1,1,1-Trichloroethane	1.7	<1.7	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1.1	<1.1	0.00016	<0.00016	1.55	11/03/19 17:44	MJL	79-34-5
1,1,2-Trichloroethane	0.86	<0.86	0.00016	<0.00016	1.55	11/03/19 17:44	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.4	<2.4	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	76-13-1
1,1-Dichloroethane	1.3	<1.3	0.00032	<0.00032	1.55	11/03/19 17:44	MJL	75-34-3
1,1-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	75-35-4
1,2,4-Trichlorobenzene	11.7	<11.7	0.0016	<0.0016	1.55	11/03/19 17:44	MJL	120-82-1
1,2,4-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.2	<1.2	0.00015	<0.00015	1.55	11/03/19 17:44	MJL	106-93-4
1,2-Dichlorobenzene	1.9	<1.9	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	95-50-1
1,2-Dichloroethane	0.64	6.2	0.00016	0.0015	1.55	11/03/19 17:44	MJL	107-06-2
1,2-Dichloropropane	1.5	<1.5	0.00032	<0.00032	1.55	11/03/19 17:44	MJL	78-87-5
1,3,5-Trimethylbenzene	1.5	<1.5	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	108-67-8
1,3-Butadiene	0.7	<0.70	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	106-99-0
1,3-Dichlorobenzene	1.9	<1.9	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	541-73-1
1,4-Dichlorobenzene	4.7	<4.7	0.00077	<0.00077	1.55	11/03/19 17:44	MJL	106-46-7
2-Butanone (MEK)	4.6	4.7	0.0015	0.0016	1.55	11/03/19 17:44	MJL	78-93-3
2-Hexanone	6.4	<6.4	0.0015	<0.0015	1.55	11/03/19 17:44	MJL	591-78-6
2-Propanol	3.9	419	0.0016	0.17	1.55	11/03/19 17:44	MJL	67-63-0
4-Ethyltoluene	3.9	<3.9	0.00078	<0.00078	1.55	11/03/19 17:44	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	6.4	<6.4	0.0015	<0.0015	1.55	11/03/19 17:44	MJL	108-10-1
Acetone	3.7	120	0.0015	0.05	1.55	11/03/19 17:44	MJL	67-64-1
Benzene	0.5	<0.50	0.00015	<0.00015	1.55	11/03/19 17:44	MJL	71-43-2
Benzyl chloride	4.1	<4.1	0.00078	<0.00078	1.55	11/03/19 17:44	MJL	100-44-7
Bromodichloromethane	2.1	<2.1	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	75-27-4
Bromoform	8.1	<8.1	0.00077	<0.00077	1.55	11/03/19 17:44	MJL	75-25-2
Bromomethane	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	74-83-9
Carbon disulfide	0.98	<0.98	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	75-15-0
Carbon tetrachloride	2	<2.0	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	56-23-5
Chlorobenzene	1.5	<1.5	0.00032	<0.00032	1.55	11/03/19 17:44	MJL	108-90-7
Chloroethane	0.83	<0.83	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	75-00-3
Chloroform	0.77	1.3	0.00016	0.00026	1.55	11/03/19 17:44	MJL	67-66-3
Chloromethane	0.65	<0.65	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	74-87-3
cis-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	156-59-2
cis-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	10061-01-5
Cyclohexane	2.7	<2.7	0.00077	<0.00077	1.55	11/03/19 17:44	MJL	110-82-7
Dibromochloromethane	2.7	<2.7	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	124-48-1
Dichlorodifluoromethane	1.6	6.9	0.00032	0.0014	1.55	11/03/19 17:44	MJL	75-71-8
Dichlorotetrafluoroethane	2.2	<2.2	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	76-14-2
Ethanol	3	698	0.0016	0.36	1.55	11/03/19 17:44	MJL	64-17-5
Ethyl acetate	1.1	16.3	0.0003	0.0044	1.55	11/03/19 17:44	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Ethylbenzene	1.4	<1.4	0.00032	<0.00032	1.55	11/03/19 17:44	MJL	100-41-4
Hexachloro-1,3-butadiene	8.4	<8.4	0.00077	<0.00077	1.55	11/03/19 17:44	MJL	87-68-3
m&p-Xylene	2.7	<2.7	0.00061	<0.00061	1.55	11/03/19 17:44	MJL	179601-23-1
Methylene Chloride	5.5	8.6	0.0016	0.0024	1.55	11/03/19 17:44	MJL	75-09-2
Methyl-tert-butyl ether	5.7	<5.7	0.0016	<0.0016	1.55	11/03/19 17:44	MJL	1634-04-4
Naphthalene	4.1	<4.1	0.00077	<0.00077	1.55	11/03/19 17:44	MJL	91-20-3
n-Heptane	1.3	22.5	0.00031	0.0054	1.55	11/03/19 17:44	MJL	142-82-5
n-Hexane	1.1	<1.1	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	110-54-3
o-Xylene	1.4	<1.4	0.00032	<0.00032	1.55	11/03/19 17:44	MJL	95-47-6
Propylene	0.54	<0.54	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	115-07-1
Styrene	1.3	2.1	0.0003	0.00048	1.55	11/03/19 17:44	MJL	100-42-5
Tetrachloroethene	1.1	7.7	0.00016	0.0011	1.55	11/03/19 17:44	MJL	127-18-4
Tetrahydrofuran	0.93	<0.93	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	109-99-9
Toluene	1.2	3.2	0.00031	0.00084	1.55	11/03/19 17:44	MJL	108-88-3
trans-1,2-Dichloroethene	1.2	<1.2	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	156-60-5
trans-1,3-Dichloropropene	1.4	<1.4	0.0003	<0.0003	1.55	11/03/19 17:44	MJL	10061-02-6
Trichloroethene	0.85	<0.85	0.00016	<0.00016	1.55	11/03/19 17:44	MJL	79-01-6
Trichlorofluoromethane	1.8	1.8	0.00032	0.00032	1.55	11/03/19 17:44	MJL	75-69-4
Vinyl acetate	1.1	<1.1	0.00031	<0.00031	1.55	11/03/19 17:44	MJL	108-05-4
Vinyl chloride	0.4	<0.40	0.00015	<0.00015	1.55	11/03/19 17:44	MJL	75-01-4

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ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Lab Sample No: 70109449003 ProjSampleNum: 70109449003 Date Collected: 10/23/19 10:15
Client Sample ID: SOUTHERN RES OUTDR AMBIEN Matrix: Air Date Received: 10/24/19 9:30

Parameters	Report Limit ug/m3	Results ug/m3	Report Limit ppmv	Results ppmv	DF	Analyzed		CAS No.
Air								
TO-15								
1,1,1-Trichloroethane	1.9	<1.9	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	71-55-6
1,1,2,2-Tetrachloroethane	1.2	<1.2	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	79-34-5
1,1,2-Trichloroethane	0.93	<0.93	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	79-00-5
1,1,2-Trichlorotrifluoroethane	2.6	<2.6	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	76-13-1
1,1-Dichloroethane	1.4	<1.4	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	75-34-3
1,1-Dichloroethene	1.4	<1.4	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	75-35-4
1,2,4-Trichlorobenzene	12.7	<12.7	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	120-82-1
1,2,4-Trimethylbenzene	1.7	<1.7	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	95-63-6
1,2-Dibromoethane (EDB)	1.3	<1.3	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	106-93-4
1,2-Dichlorobenzene	2	<2.0	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	95-50-1
1,2-Dichloroethane	0.69	<0.69	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	107-06-2
1,2-Dichloropropane	1.6	<1.6	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	78-87-5
1,3,5-Trimethylbenzene	1.7	<1.7	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	108-67-8
1,3-Butadiene	0.76	<0.76	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	106-99-0
1,3-Dichlorobenzene	2	<2.0	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	541-73-1
1,4-Dichlorobenzene	5.1	<5.1	0.00083	<0.00083	1.68	11/03/19 18:13	MJL	106-46-7
2-Butanone (MEK)	5	<5.0	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	78-93-3
2-Hexanone	7	<7.0	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	591-78-6
2-Propanol	4.2	<4.2	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	67-63-0
4-Ethyltoluene	4.2	<4.2	0.00084	<0.00084	1.68	11/03/19 18:13	MJL	622-96-8
4-Methyl-2-pentanone (MIBK)	7	<7.0	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	108-10-1
Acetone	4	10.3	0.0017	0.0043	1.68	11/03/19 18:13	MJL	67-64-1
Benzene	0.55	<0.55	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	71-43-2
Benzyl chloride	4.4	<4.4	0.00084	<0.00084	1.68	11/03/19 18:13	MJL	100-44-7
Bromodichloromethane	2.3	<2.3	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	75-27-4
Bromoform	8.8	<8.8	0.00084	<0.00084	1.68	11/03/19 18:13	MJL	75-25-2
Bromomethane	1.3	<1.3	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	74-83-9
Carbon disulfide	1.1	<1.1	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	75-15-0
Carbon tetrachloride	2.2	<2.2	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	56-23-5
Chlorobenzene	1.6	<1.6	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	108-90-7
Chloroethane	0.9	<0.90	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	75-00-3
Chloroform	0.83	<0.83	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	67-66-3
Chloromethane	0.71	<0.71	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	74-87-3
cis-1,2-Dichloroethene	1.4	<1.4	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	156-59-2
cis-1,3-Dichloropropene	1.6	<1.6	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	10061-01-5
Cyclohexane	2.9	<2.9	0.00083	<0.00083	1.68	11/03/19 18:13	MJL	110-82-7
Dibromochloromethane	2.9	<2.9	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	124-48-1
Dichlorodifluoromethane	1.7	2.4	0.00034	0.00048	1.68	11/03/19 18:13	MJL	75-71-8
Dichlorotetrafluoroethane	2.4	<2.4	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	76-14-2
Ethanol	3.2	3.6	0.0017	0.0019	1.68	11/03/19 18:13	MJL	64-17-5
Ethyl acetate	1.2	<1.2	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	141-78-6

SUPPLEMENTAL REPORT
Units Conversion Request

Pace Analytical Services, Inc.
1700 Elm Street – Suite 200
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

ANALYTICAL RESULTS

Client: PASI Long Island- Melville
Phone: 631 694-3040

Lab Project Number: 10496822
Project Name: 70109449 Cashin Associates

Ethylbenzene	1.5	<1.5	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	100-41-4
Hexachloro-1,3-butadiene	9.1	<9.1	0.00084	<0.00084	1.68	11/03/19 18:13	MJL	87-68-3
m&p-Xylene	3	<3.0	0.00068	<0.00068	1.68	11/03/19 18:13	MJL	179601-23-1
Methylene Chloride	5.9	16.5	0.0017	0.0047	1.68	11/03/19 18:13	MJL	75-09-2
Methyl-tert-butyl ether	6.1	<6.1	0.0017	<0.0017	1.68	11/03/19 18:13	MJL	1634-04-4
Naphthalene	4.5	<4.5	0.00084	<0.00084	1.68	11/03/19 18:13	MJL	91-20-3
n-Heptane	1.4	<1.4	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	142-82-5
n-Hexane	1.2	<1.2	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	110-54-3
o-Xylene	1.5	<1.5	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	95-47-6
Propylene	0.59	<0.59	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	115-07-1
Styrene	1.5	<1.5	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	100-42-5
Tetrachloroethene	1.2	<1.2	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	127-18-4
Tetrahydrofuran	1	<1.0	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	109-99-9
Toluene	1.3	1.8	0.00034	0.00047	1.68	11/03/19 18:13	MJL	108-88-3
trans-1,2-Dichloroethene	1.4	<1.4	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	156-60-5
trans-1,3-Dichloropropene	1.6	<1.6	0.00035	<0.00035	1.68	11/03/19 18:13	MJL	10061-02-6
Trichloroethene	0.92	<0.92	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	79-01-6
Trichlorofluoromethane	1.9	<1.9	0.00033	<0.00033	1.68	11/03/19 18:13	MJL	75-69-4
Vinyl acetate	1.2	<1.2	0.00034	<0.00034	1.68	11/03/19 18:13	MJL	108-05-4
Vinyl chloride	0.44	<0.44	0.00017	<0.00017	1.68	11/03/19 18:13	MJL	75-01-4

APPENDIX D

Indoor Air Quality Questionnaire

And

Building Inventory for the Subject Site

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Marc Califano Date/Time Prepared 10/22/2019 3:00 P.m.

Preparer's Affiliation Cashin Technical Services, Inc. Phone No. (631) 348-7600 x41

Purpose of Investigation Periodic Review Report 2019
VCA: W1-0848-9903 Site # V00220

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Khalid First Name: Zubair

Address: 290 Bayview AVenue, Bayville, NY 11709

County: NaSSau

Home Phone: — Office Phone: (516) 628-1522

Number of Occupants/persons at this location 2 Age of Occupants 50's
one (1) owner/manager
one (1) Employee

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: (Y) / N

Last Name: Ryan First Name: Thomas

Address: 19 Todd Drive, Glen Head, NY 11545

County: NaSSau

Home Phone: — Office Phone: (516) 317-3183
Cell

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential	School	(Commercial)/Multi-use
Industrial	Church	Other: Dry Cleaners

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? N/A

If the property is commercial, type?

Business Type(s) Dry Cleaners

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? _____

Other characteristics:

Number of floors 1 Building age 60 yrs.

Is the building insulated? (Y) / N How air tight? (Tight) / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A

Airflow near source

N/A

Outdoor air infiltration

N/A

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:		wood frame	(concrete)	stone	brick
b. Basement type:	N/A	full	crawlspace	slab	other _____
c. Basement floor:	N/A	concrete	dirt	stone	other _____
d. Basement floor:	N/A	uncovered	covered	covered with _____	
e. Concrete floor:		(unsealed)	sealed	sealed with _____	
f. Foundation walls:		poured	(block)	stone	other _____
g. Foundation walls:		(unsealed)	sealed	sealed with _____	
h. The basement is:	N/A	wet	damp	dry	moldy
i. The basement is:	N/A	finished	unfinished	partially finished	
j. Sump present?		Y / (N)			
k. Water in sump?		Y / N / (not applicable)			

Basement/Lowest level depth below grade: _____(feet) N/A

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

During installation of SSDS, all possible entry points (i.e., cracks) were sealed-off to prevent the entrance of soil gas vapors and to enhance sub-slab negative pressure field of the active SSDS.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: Central Air (Window units) Open Windows None

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / (N) If yes, where vented? _____

n. Is there a bathroom exhaust fan? Y / (N) If yes, where vented? _____

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? (Y) / N Building use = Dry cleaners
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? Dry cleaning spotting products - See page 8, Item #13

If yes, are their clothes washed at work? Y / (N)

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)	No
Yes, use dry-cleaning infrequently (monthly or less)	Unknown
(Yes, work at a dry-cleaning service)	

Is there a radon mitigation system for the building/structure? (Y) / N Date of Installation: 9/2012
Is the system active or passive? (Active)/Passive

9. WATER AND SEWAGE

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	Public Sewer	Septic Tank	Leach Field	Dry Well	Other: Cesspool

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N N/A

d. Relocation package provided and explained to residents? Y / N

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See ATTACHED FIGURE 1

13. PRODUCT INVENTORY FORM 1 of 3

Make & Model of field instrument used: Olympus Camera

List specific products found in the ~~residence~~ Dry Cleaners that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units) MSDS Y/N	Photo** Y / N
Backroom	Hydrogen peroxide	1-GAL	U	35% Hydrogen peroxide & H_2O	MSDS Y	Y
Backroom	Ammonia (2)	1-GAL 1-GAL	UO U	Ammonia & water MSDS	Y	Y
Backroom	Shot-Spot (2)	1-GAL 1-GAL	U UO	MSDS	Y	Y
Backroom	Simple Blue (6)	6-GALS	1-U 5-UO	Sodium dodecylbenzene Sulfonates Alcohol Ethoxylate Alkylsulfate	N	Y
Backroom	EZ Rail slide-C	32oz	U	MSDS	Y	Y
Backroom	DCS Hydrocon	16oz	U	MSDS	Y	Y
Backroom	2-1 Formula	12oz	U	MSDS	Y	Y
Backroom	DCS ultra	16oz	U	MSDS	Y	Y
Backroom	Faultless Niagara Spray starch (28)	20oz	26-UO 2-U	MSDS	Y	Y
Backroom	Clorox Bleach	1-GAL	U	MSDS	Y	Y
Backroom	Adco Release (4)	1-GAL	3-UO 1-U	MSDS	Y	Y
Backroom	Adco Easy-out (5)	1-GAL	5-UO	MSDS	Y	Y
Spotting Board	Adco Puro	1-GAL	U	MSDS	Y	Y
Spotting Board	Laidlaw Swan cote (10) water & stain Repellant	16oz	8-UO 2-U	MSDS	Y	Y
Spotting Board	Sunshine Fresh Solvent Freshener	1-GAL	U	MSDS	Y	Y
Spotting Board	Kleerwite Tanaway	1-GAL	U	MSDS	Y	Y
Spotting Board	Easy Go Spray spotter	1-GAL	U	MSDS	Y	Y
Spotting Board	CALED Tan-E-CAL Plus	1-GAL	U	MSDS	Y	Y
Spotting Board	Hydrogen peroxide	8oz	U	MSDS	Y	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM 2 of 3

Make & Model of field instrument used: Olympus Camera

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units) MSDS Y/N	Photo ** Y / N
Spotting Board	Odor Ex (2)	16 oz	2-U	MSDS	Y	Y
Spotting Board	Picrin Dry-Side (3)	12 oz	3-U	MSDS	Y	Y
Spotting Board	Hydro Spot ProSafe All purpose	16 oz	U	MSDS	Y	Y
Spotting Board	urine off multi pet	16 oz	U	MSDS	Y	Y
Spotting Board	Easy Go Spray spotter	16 oz	U	MSDS	Y	Y
Spotting Board	H/C Too Hydrocarbon spotter	12 oz	U	MSDS	Y	Y
Spotting Board	Cinch	12 oz	U	MSDS	Y	Y
Spotting Board	APOG 6 American Paint oil, grease remover	12 oz	U	MSDS	Y	Y
Spotting Board	Hydro Spot 2	12 oz	U	MSDS	Y	Y
Spotting Board	Adco 5	12 oz	U	MSDS	Y	Y
Spotting Board	Adco 3	12 oz	U	MSDS	Y	Y
Spotting Board	NCP Jinx Ink	16 oz	U	MSDS	Y	Y
Spotting Board	Ink Go Ink & Tape remover	16 oz	U	MSDS	Y	Y
Spotting Board	RustGo	14 oz	U	MSDS	Y	Y
Maintenance Shelf	Peak Antifreeze coolant (3)	1-GAL	2-UO 1-U	MSDS	Y	Y
Maintenance Shelf	Alphasew - Sewing machine oil (2)	32 oz	1-UO 1-U	MSDS	Y	Y
Maintenance Shelf	WD-40	11 oz	1-U	MSDS	Y	Y
Maintenance Shelf	SAE 30 ND motor oil	1-QT	U	MSDS	Y	Y
Maintenance Shelf	Lysol Disinfectant Spray	16 oz	U	MSDS	Y	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

13. PRODUCT INVENTORY FORM 3 of 3

Make & Model of field instrument used: olympus Camera

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units) MSDS Y/N	Photo ** Y / N
Bathroom	Pine Sol (2)	175 oz	1-U 1-UO	MSDS	Y	Y
Bathroom	Windex	1-GAL	U	MSDS	Y	Y
Bathroom	Windex	32 oz	U	MSDS	Y	Y
Bathroom	Comet W/ Bleach Disinfectant	28 oz	U	MSDS	Y	Y
Bathroom	Berkley hand Soap	64 oz	U	MSDS	Y	Y
Bathroom	Listerine	1.5L	U	MSDS	Y	Y
Boiler Room	White Vinegar (3)	1-GAL	1-U 2-UO	MSDS	Y	Y
Boiler Room	Adco Boiler compound	1-GAL	U	MSDS	Y	Y
Dry cleaning machine	Hydrocarbon waste	30-GALS	Storage Drum		N	Y
Dry cleaning Machine	Lint Waste	30-GALS	Storage Drum		N	Y
Dry cleaning machine	Liquid Waste	30-GALS	Storage Drum		N	Y

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX E

Indoor Air Quality Questionnaire

and

Building Inventory for the Southern Residential Property

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Marc Califano Date/Time Prepared 10/22/2019 10:20 A.M.

Preparer's Affiliation Cashin Technical Services, Inc. Phone No. (631) 348-7600 x41

Purpose of Investigation Sample for evidence of vapor intrusion from northerly adjacent dry cleaners (Bayville Village Cleaners).

1. OCCUPANT:

Interviewed: (Y) / N

Last Name: Canales First Name: Roberto

Address: 3 17th Street, Bayville, NY 11709

County: Nassau

Home Phone: — Cell Office Phone: (516) 761-1544

Number of Occupants/persons at this location 2 Age of Occupants 50's

2. OWNER OR LANDLORD: (Check if same as occupant ✓)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

(Residential) School Commercial/Multi-use
Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If multiple units, how many? _____

If the property is commercial, type? N/A

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other characteristics:

Number of floors 2 Building age 37

Is the building insulated? (Y) / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A

Airflow near source

N/A

Outdoor air infiltration

N/A

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	concrete	stone	brick
b. Basement type: N/A	full	crawlspace	slab	other _____
c. Basement floor: N/A	concrete	dirt	stone	other _____
d. Basement floor: N/A	uncovered	covered	covered with _____	
e. Concrete floor:	unsealed	sealed	sealed with _____	
f. Foundation walls:	poured	block	stone	other _____
g. Foundation walls:	unsealed	sealed	sealed with _____	
h. The basement is: N/A	wet	damp	dry	moldy
i. The basement is: N/A	finished	unfinished	partially finished	
j. Sump present?	Y / N			
k. Water in sump?	Y / N / not applicable			

Basement/Lowest level depth below grade: _____(feet) N/A

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Concrete floor is Completly Covered in tiles. (Good Condition)

_____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

Natural Gas	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Natural Gas

Boiler/furnace located in:	Basement	Outdoors	Main Floor	Other_____
Air conditioning:	Central Air	Window units	Open Windows	None

Are there air distribution ducts present? Y / (N)

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

N/A

7. OCCUPANCY

Is basement/lowest level occupied? (Full-time) Occasionally Seldom Almost Never

Level	**General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)**
Basement	—
1st Floor	Kitchen, Family room, bedroom, bathroom
2nd Floor	Living Room, bedrooms, bathroom
3rd Floor	—
4th Floor	—

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage? (Y) / N

b. Does the garage have a separate heating unit? Y / (N) / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / NA
Please specify_____

d. Has the building ever had a fire? Y / (N) When?_____

e. Is a kerosene or unvented gas space heater present? Y / (N) Where?_____

f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? _____

g. Is there smoking in the building? Y / (N) How frequently? _____

h. Have cleaning products been used recently? Y / (N) When & Type? _____

i. Have cosmetic products been used recently? Y / (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / (N) Where & When? _____

l. Have air fresheners been used recently? Y / (N) When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where vented? unknown – Limited Access

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? unknown

o. Is there a clothes dryer? (Y) / N If yes, is it vented outside? (Y) / N

p. Has there been a pesticide application? Y / (N) When & Type? _____

Are there odors in the building? Y / (N)
If yes, please describe: _____

Do any of the building occupants use solvents at work? Y / (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? _____ N/A

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)
Yes, use dry-cleaning infrequently (monthly or less) Unknown
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N) Date of Installation: _____
Is the system active or passive? Active/Passive

9. WATER AND SEWAGE

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer (Septic Tank) Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency) N/A

a. Provide reasons why relocation is recommended: _____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N N/A

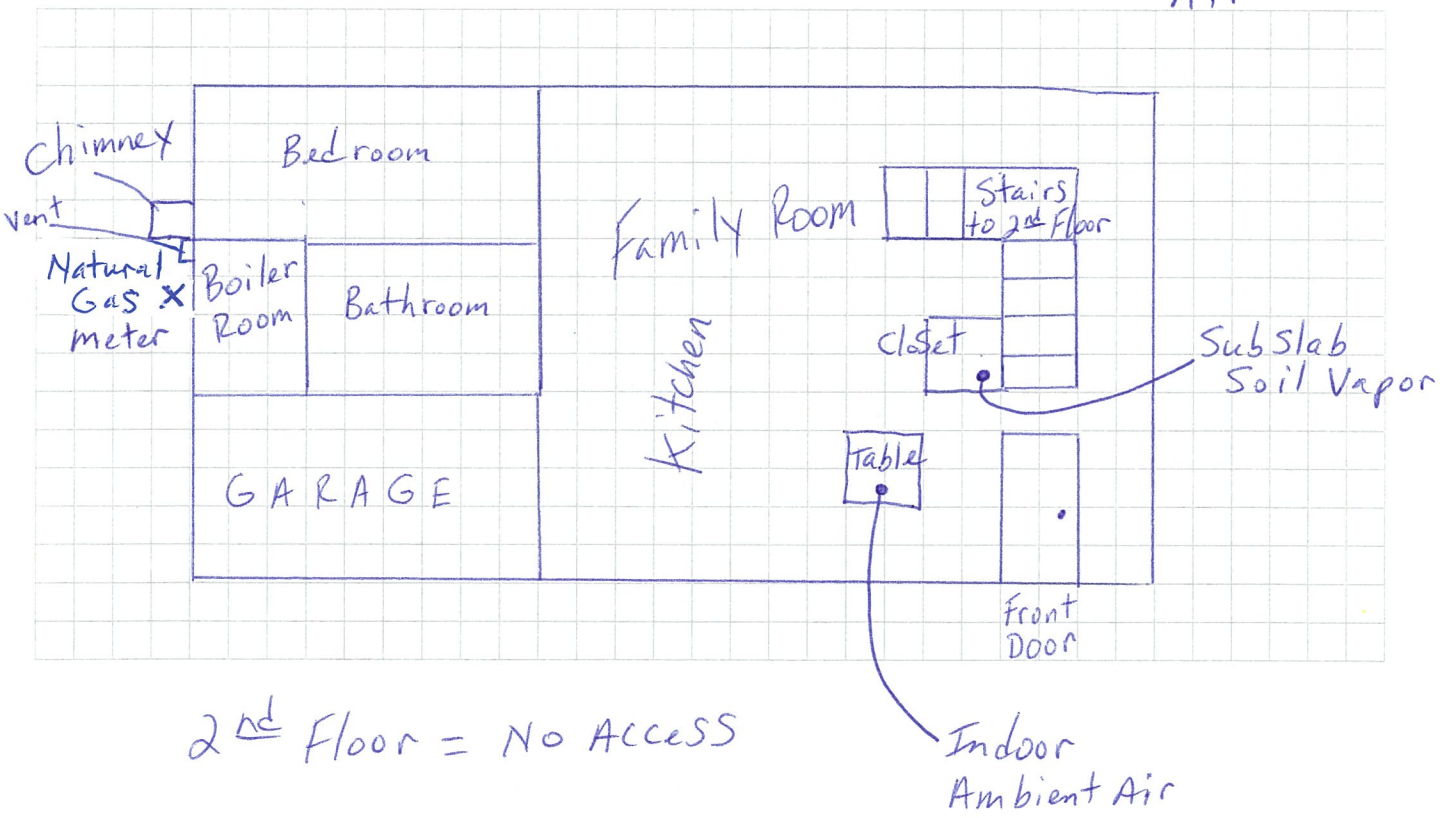
11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

No Basement

First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Attached Figure 1

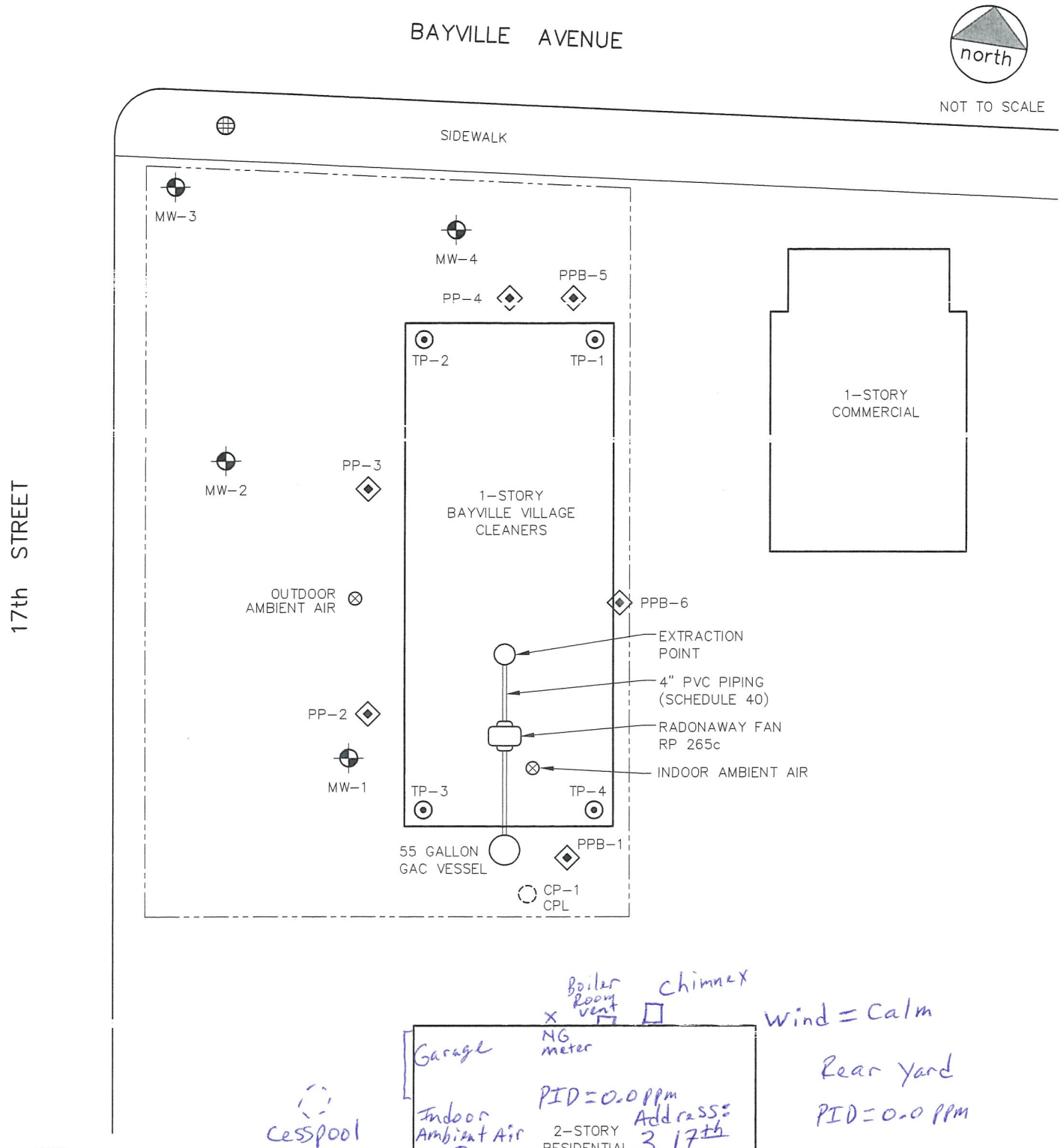


FIGURE 1

SITE SAMPLING SKETCH

Bayville Village Cleaners

290 Bayville Avenue

Bayville, New York

Cashin Associates, P.C.

ENGINEERING PLANNING CONSTRUCTION MANAGEMENT

13CTS.022 TASK 5

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y / N
	N/A		Limited	Access		

* Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D)**
** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX F

Sub-Slab Depressurization Site Management Form

BAYVILLE VILLAGE CLEANERS
290 BAYVILLE AVENUE
BAYVILLE, NEW YORK 11560
SUB-SLAB DEPRESSURIZATION SITE MANAGEMENT FORM

2017	Date	Yes	No	If No - Action Taken	Print Name of Inspector	Signature of Inspector
Discharge Pipe Clear of Obstruction	12/27/17	✓			MARC CALEFANO	M. Calefano
General System Piping Inspection	12/27/17	✓			MARC CALEFANO	M. Calefano
RadonAway Fan Running Properly	12/27/17	✓			MARC CALEFANO	M. Calefano
RadonAway Alarm Operating Properly	12/27/17	✓			MARC CALEFANO	M. Calefano
Negative Pressure Monitoring	12/27/17	✓			MARC CALEFANO	M. Calefano
VOC PID Monitoring	12/27/17	✓			MARC CALEFANO	M. Calefano
Ambient Air Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Influent Air Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Effluent Air Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Exterior Soil Vapor Gas Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Groundwater Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Replacement of Filter Media	12/27/17		✓	Not Yet Required. No contaminant Breakthrough	MARC CALEFANO	M. Calefano
Sanitary Leaching Pool Sampling	12/27/17	✓			MARC CALEFANO	M. Calefano
Building Inventory Questionnaire	12/27/17	✓			MARC CALEFANO	M. Calefano
2018						
Discharge Pipe Clear of Obstruction	5/18/18	✓			MARC CALEFANO	M. Calefano
General System Piping Inspection	5/18/18	✓			MARC CALEFANO	M. Calefano
RadonAway Fan Running Properly	Replaced ON 5/18/18				MARC CALEFANO	M. Calefano
RadonAway Alarm Operating Properly	5/18/18	✓			MARC CALEFANO	M. Calefano
Negative Pressure Monitoring	5/18/18	✓			MARC CALEFANO	M. Calefano
VOC PID Monitoring						
Ambient Air Sampling						
Influent Air Sampling	N/A	N/A	N/A	N/A	N/A	N/A
Effluent Air Sampling						
Exterior Soil Vapor Gas Sampling						
Groundwater Sampling						
Replacement of Filter Media	Replaced 4/25/18	✓			MARC CALEFANO	M. Calefano
Sanitary Leaching Pool Sampling	N/A	N/A	N/A	N/A	N/A	N/A
Building Inventory Questionnaire						
2019						
Discharge Pipe Clear of Obstruction	10/22/19	✓			MARC CALEFANO	M. Calefano
General System Piping Inspection	10/22/19	✓			MARC CALEFANO	M. Calefano
RadonAway Fan Running Properly	10/22/19	✓			MARC CALEFANO	M. Calefano
RadonAway Alarm Operating Properly	10/22/19	✓			MARC CALEFANO	M. Calefano
Negative Pressure Monitoring	10/22/19	✓			MARC CALEFANO	M. Calefano
VOC PID Monitoring	10/22/19	✓			MARC CALEFANO	M. Calefano
Ambient Air Sampling	10/22/19	✓			MARC CALEFANO	M. Calefano
Influent Air Sampling	10/22/19	✓			MARC CALEFANO	M. Calefano
Effluent Air Sampling	10/22/19	✓			MARC CALEFANO	M. Calefano
Exterior Soil Vapor Gas Sampling	10/22/19	✓			MARC CALEFANO	M. Calefano
Groundwater Sampling	10/22/19	✓			MARC CALEFANO	M. Calefano
Replacement of Filter Media	10/22/19		✓	No contaminant breakthrough	MARC CALEFANO	M. Calefano
Sanitary Leaching Pool Sampling	N/A	N/A	N/A	Not required in SMP	N/A	N/A
Building Inventory Questionnaire	10/22/19	✓			MARC CALEFANO	M. Calefano

Only performed during Additional Sampling 12/27/17

APPENDIX G

Photographs



Photograph #1 - View of permanent soil gas sampling.



Photograph #2 - View of influent and effluent air sampling.



Photograph #3 – Typical view of groundwater sampling activities.



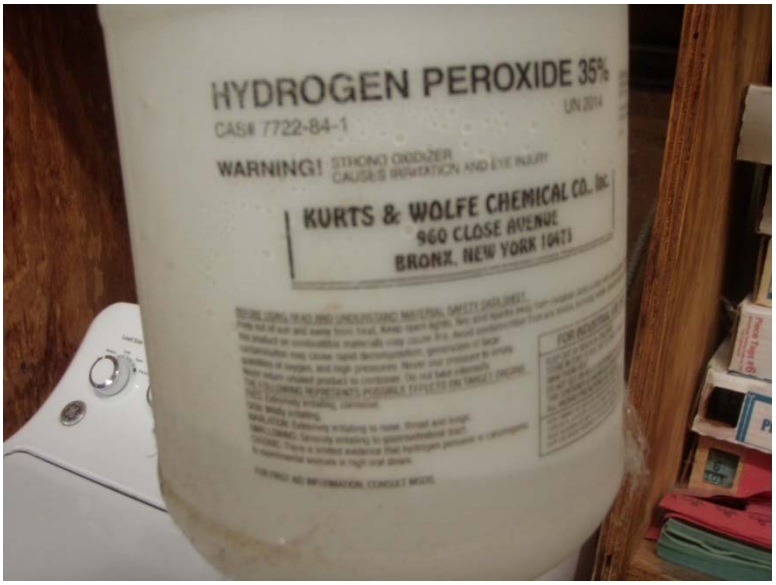
Photograph #4 - View of hazardous waste drums.



Photograph #5 – View of NWC truck picking up hazardous waste.



Photograph #6 – View of dry cleaning products.



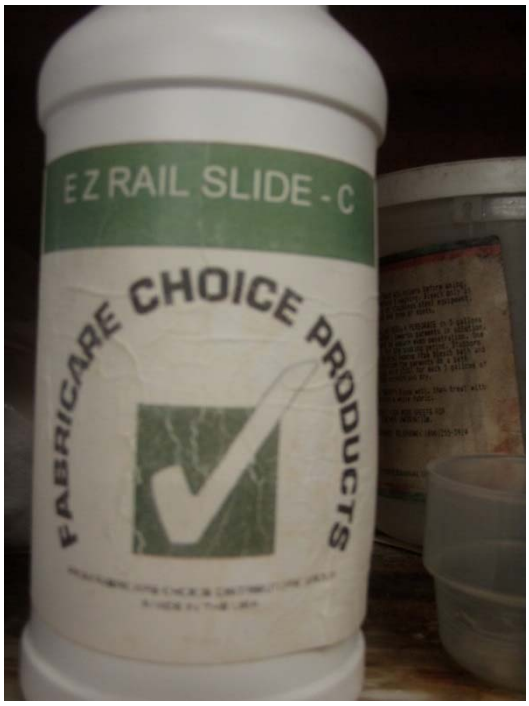
Photograph #7 – View of dry cleaning products.



Photograph #8 – View of dry cleaning products.



Photograph #9 – View of dry cleaning products.



Photograph #10 – View of dry cleaning products.



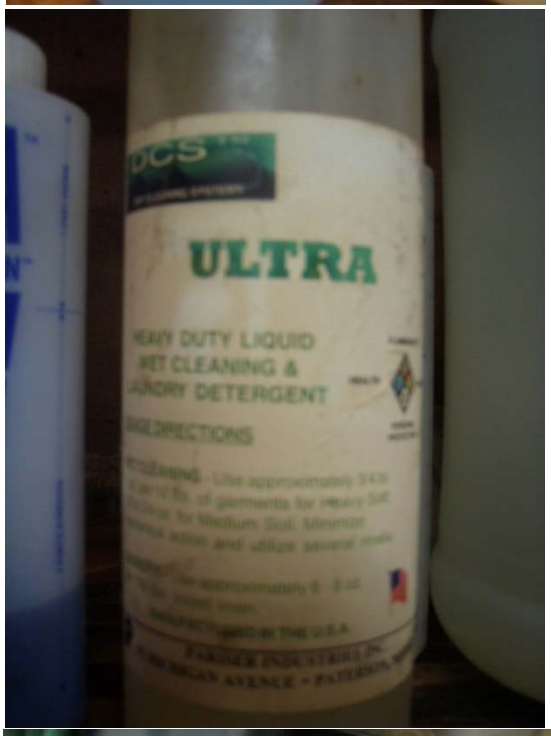
Photograph #11 – View of dry cleaning products.



Photograph #12 – View of dry cleaning products.



Photograph #13 – View of dry cleaning products.



Photograph #14 – View of dry cleaning products.



Photograph #15 – View of dry cleaning products.



Photograph #16 – View of dry cleaning products.



Photograph #17 – View of dry cleaning products.



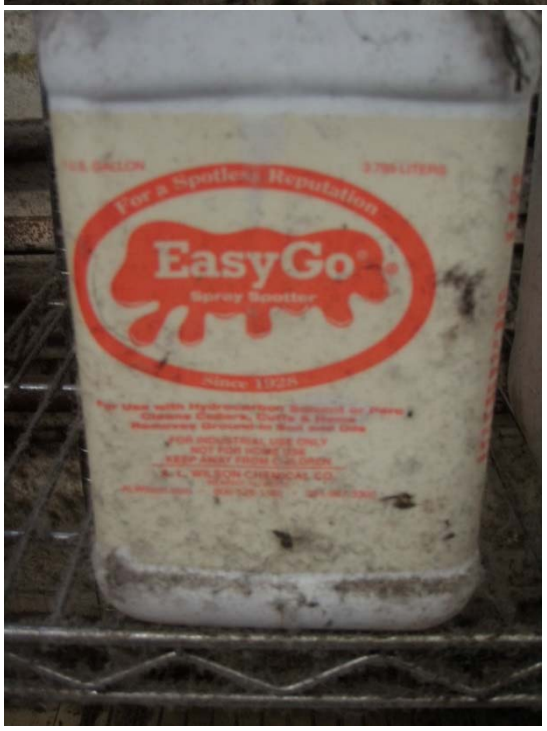
Photograph #18 – View of dry cleaning products.



Photograph #19 – View of dry cleaning products.



Photograph #20 – View of dry cleaning products.



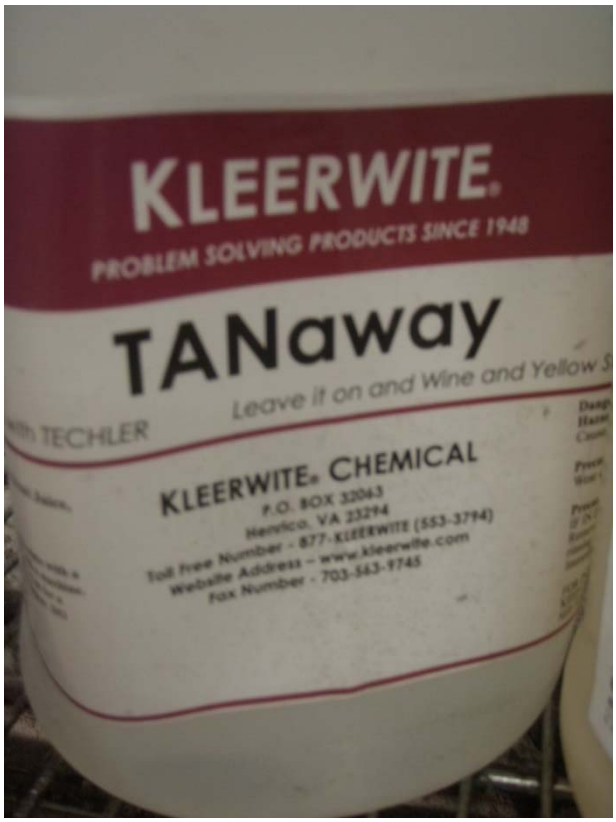
Photograph #21 – View of dry cleaning products.



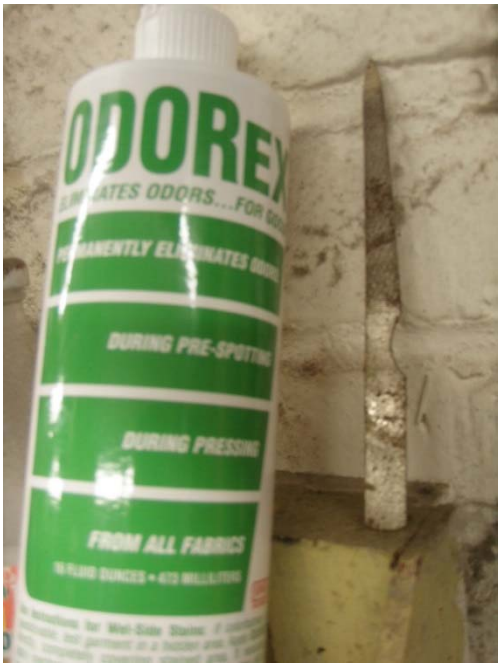
Photograph #22 – View of dry cleaning products.



Photograph #23 – View of dry cleaning products.



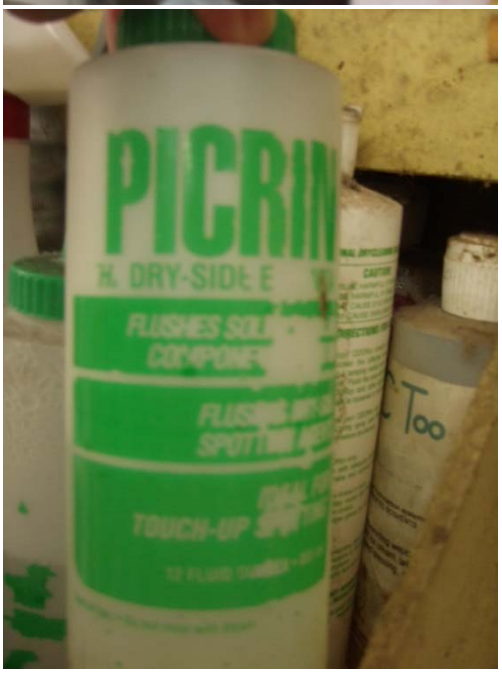
Photograph #24 – View of dry cleaning products.



Photograph #25 – View of dry cleaning products.



Photograph #26 – View of dry cleaning products.



Photograph #27 – View of dry cleaning products.



Photograph #28 – View of dry cleaning products.



Photograph #29 – View of dry cleaning products.



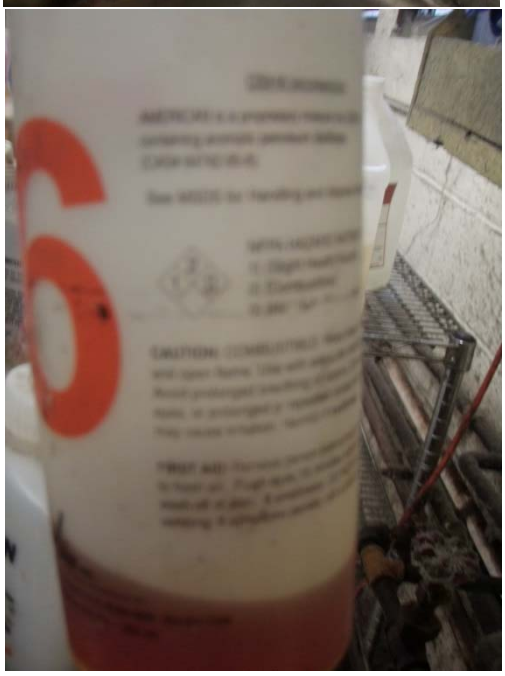
Photograph #30 – View of dry cleaning products.



Photograph #31 – View of dry cleaning products.



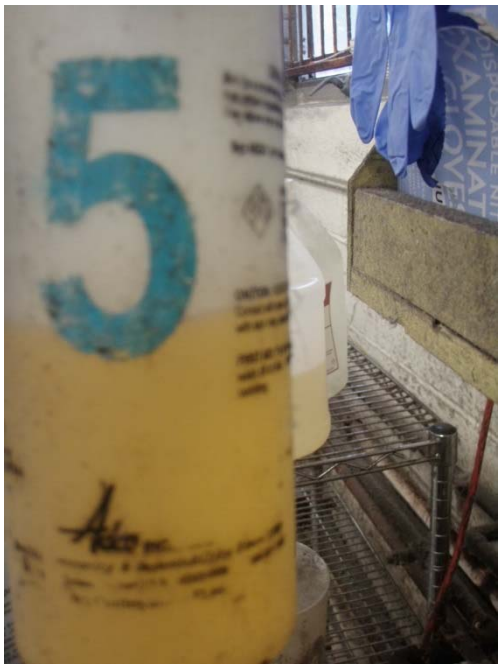
Photograph #32 – View of dry cleaning products.



Photograph #33 – View of dry cleaning products.



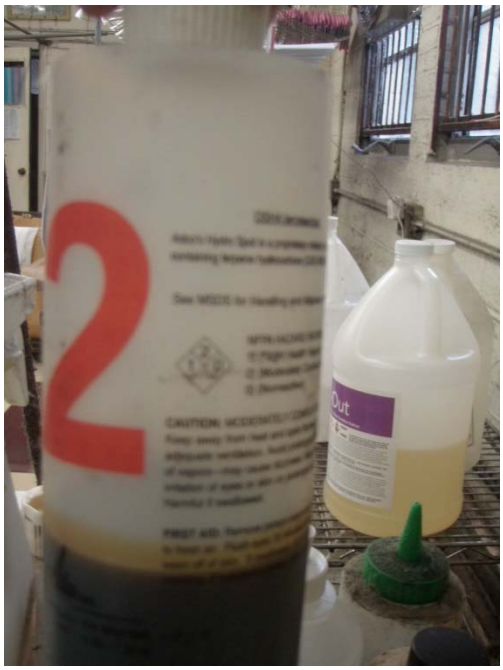
Photograph #34 – View of dry cleaning products.



Photograph #35 – View of dry cleaning products.



Photograph #36 – View of dry cleaning products.



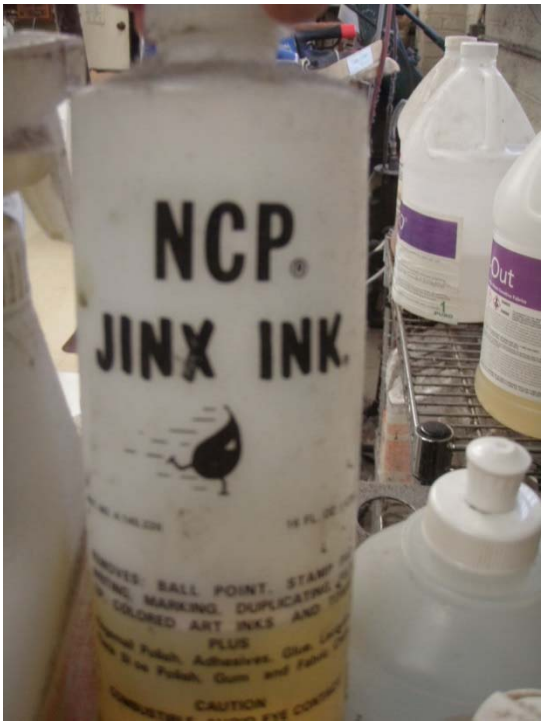
Photograph #37 – View of dry cleaning products.



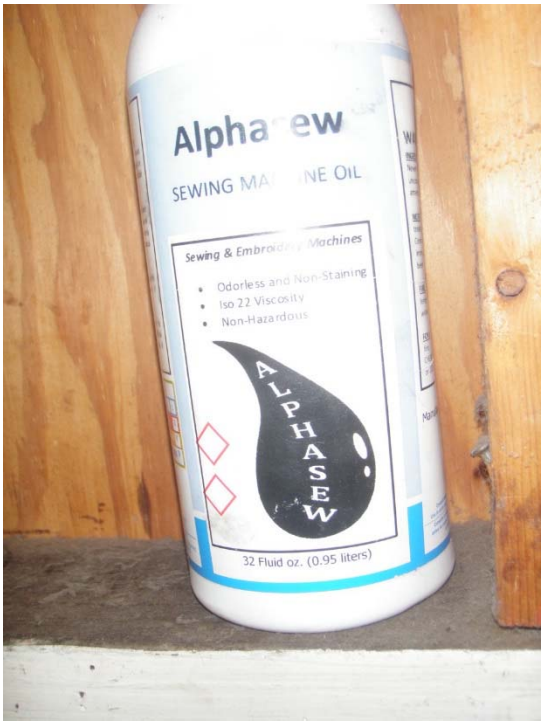
Photograph #38 – View of dry cleaning products.



Photograph #39 – View of dry cleaning products.



Photograph #40 – View of dry cleaning products.



Photograph #41 – View of dry cleaning products.



Photograph #42 – View of dry cleaning products.



Photograph #43 – View of common cleaners in bathroom.



Photograph #44 – View of common cleaners in bathroom.



Photograph #45 – View of SSDS fan.

APPENDIX H

Material Safety Data Sheets (MSDS) for On-Site Chemicals

SAFETY DATA SHEET
HYDROGEN PEROXIDE 35%

SDS # : 7722-84-1--35
Revision date: 2015-03-18
Format: NA
Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name HYDROGEN PEROXIDE 35%

Other means of identification

CAS-No 7722-84-1

Recommended use of the chemical and restrictions on use

Recommended Use:

Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

PeroxyChem LLC
2005 Market Street
Suite 3200
Philadelphia, PA 19103
Phone: +1 267/ 422-2400 (General Information)
E-Mail: sdsinfo@peroxychem.com

PeroxyChem Canada
PG Pulp Mill Road
Prince George, BC V2N2S6
1+ 250/ 561-4200 (General Information)

Emergency telephone number

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)
1 613/ 996-6666 (CANUTEC - Canada)
1 303/ 389-1409 (Medical - U.S. - Call Collect)

1 281 / 474-8750 (Bayport, Texas Plant)
1 250 / 561-4221 (Prince George, BC, Canada Plant)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2 Sub-category B
Serious eye damage/eye irritation	Category 1

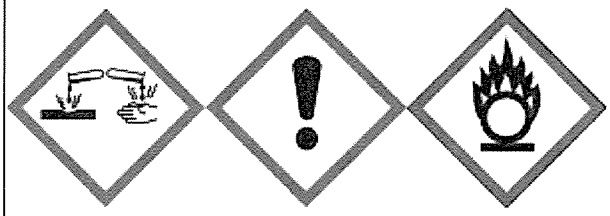
Specific target organ toxicity (single exposure)	Category 3
Oxidizing Liquids	Category 2

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements
H318 - Causes serious eye damage
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H315 - Causes skin irritation
H270 - May cause or intensify fire; oxidizer



Precautionary Statements - Prevention
P271 - Use only outdoors or in a well-ventilated area
P261 - Avoid breathing mist/vapors/spray
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P221 - Take any precaution to avoid mixing with combustibles/flammables
P220 - Keep/Store away from clothing/flammable materials/combustibles

Precautionary Statements - Response
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P332 + P313 - If skin irritation occurs: Get medical advice/ attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P370 + P378 - In case of fire: Use water for extinction

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information

Keep container in a cool place out of direct sunlight. Store only in vented containers. Do not store on wooden pallets. Do not return unused material to its original container. Avoid contamination - Contamination could cause decomposition and generation of oxygen which may result in high pressure and possible container rupture. Empty drums should be triple rinsed with water before discarding.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula HO - OH

Chemical name	CAS-No	Weight %
Hydrogen peroxide	7722-84-1	35
Water	7732-18-5	65

Occupational exposure limits, if available, are listed in section 8

4. FIRST AID MEASURES

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Seek immediate medical attention/advice.

Skin Contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Inhalation
Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Ingestion
Rinse mouth. Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
In case of accidental ingestion, necrosis may result from mucous membrane burns (mouth, esophagus and stomach). Oxygen rapid release may cause stomach swelling and hemorrhaging, which may product major, or even fatal, injury to organs if a large amount has been ingested.
In case of skin contact, may cause burns, erythema, blisters or even necrosis. Hydrogen Peroxide irritates respiratory system and, if inhaled, may cause inflammation and pulmonary edema. The effects may not be immediate.

Indication of immediate medical attention and special treatment needed, if necessary
Hydrogen peroxide at these concentrations is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately. Careful opthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion, and the unlikelihood of systemic effects, attemps at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Water. Do not use any other substance.

Specific Hazards Arising from the Chemical
In closed unventilated containers, risk of rupture due to the increased pressure from decomposition. Contact with combustible material may cause fire

Hazardous Combustion Products
On decomposition product releases oxygen which may intensify fire.

Explosion data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Protective equipment and precautions for firefighters
Use water spray to cool fire exposed surfaces and protect personnel. Move containers from fire area if you can do it without risk. As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Isolate and post spill area. Keep people away from and upwind of spill/leak. Eliminate all sources of ignition and remove combustible materials.

Other

Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

Environmental Precautions

Do not flush into surface water or sanitary sewer system; if discharged into sewers or watercourses, dilute with plenty of water. See Section 12 for additional Ecological Information.

Methods for Containment

Dike to collect large liquid spills. Stop leak and contain spill if this can be done safely. Small spillage: Dilute with large quantities of water.

Methods for cleaning up

Flush area with flooding quantities of water. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%.

7. HANDLING AND STORAGE

Handling

Keep/Store away from clothing/ combustible materials. Wear personal protective equipment. Reference to other sections. Never return unused hydrogen peroxide to original container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressures and possible container rupture. Empty drums should be triple rinsed with water before discarding. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic. Pipes and equipment should be passivated before first use. Use only in well-ventilated areas. Hydrogen peroxide should be stored only in vented containers and transferred only in a prescribed manner.

Storage

Keep containers in cool areas out of direct sunlight and away from combustibles. Provide mechanical general and/or local exhaust ventilation to prevent release of vapor or mist into work environment. Containers must be vented. Keep/store only in original container. Store rooms or warehouses should be made of non-combustible materials with impermeable floors. In case of release, spillage should flow to safe area. Containers should be visually inspected on a regular basis to detect any abnormalities (swollen drums, increases in temperature, etc.).

Incompatible products

Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Ingredients with workplace control parameters.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³	IDLH: 75 ppm TWA: 1 ppm TWA: 1.4 mg/m³	Mexico: TWA 1 ppm Mexico: TWA 1.5 mg/m³ Mexico: STEL 2 ppm Mexico: STEL 3 mg/m³
Chemical name	**British Columbia**	**Quebec**	**Ontario TWAEV**	**Alberta**
Hydrogen peroxide 7722-84-1	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³	TWA: 1 ppm	TWA: 1 ppm TWA: 1.4 mg/m³

Appropriate engineering controls

Engineering measures Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use chemical splash-type monogoggles and a full-face shield made of polycarbonate, acetate, polycarbonate/acetate, PETG or thermoplastic.

Skin and Body Protection For body protection wear impervious clothing such as an approved splash protective suit made of SBR rubber, PVC (PVC Outershell w/Polyester Substrate), Gore-Tex (Polyester trilaminate w/Gore-Tex), or a specialized HAZMAT Splash or Protective Suite (Level A, B, or C). For foot protection, wear approved boots made of NBR, PVC, Polyurethane, or neoprene. Overboots made of Latex or PVC, as well as firefighter boots or specialized HAZMAT boots are also permitted. DO NOT wear any form of boot or overboot made of nylon or nylon blends. DO NOT USE cotton, wool or leather as these materials react rapidly with higher concentrations of hydrogen peroxide. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles, can cause the material to ignite and result in a fire.

Hand Protection For hand protection, wear approved gloves made of nitrile, PVC, or neoprene. DO NOT use cotton, wool or leather for these materials react RAPIDLY with higher concentrations of hydrogen peroxide. Thoroughly rinse the outside of gloves with water prior to removal. Inspect regularly for leaks.

Respiratory Protection If concentrations in excess of 10 ppm are expected, use NIOSH/DHHS approved self-contained breathing apparatus (SCBA) or other approved air-supplied respirator (ASR) equipment (e.g., a full-face airline respirator (ALR)). DO NOT use any form of air-purifying respirator (APR) or filtering facepiece (dust mask), especially those containing oxidizable sorbants such as activated carbon.

Hygiene measures Avoid breathing vapors, mist or gas. Clean water should be available for washing in case of eye or skin contamination. .

General information Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Physical State	Liquid
Color	Colorless
Odor	odorless
Odor threshold	Not applicable
pH	<= 3.7
Melting point/freezing point	-33 °C
Boiling Point/Range	108 °C
Flash point	Not flammable
Evaporation Rate	> 1 (n-butyl acetate=1)
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	Not applicable
Upper flammability limit:	
Lower flammability limit:	
Vapor pressure	23 mm Hg @ 30 °C
Vapor density	No information available
Density	1.13 g/cm³ @ 20°C
Specific gravity	1.13
Water solubility	completely soluble
Solubility in other solvents	No information available
Partition coefficient	log Kow = -1.5 @ 20 °C
Autoignition temperature	Not combustible
Decomposition temperature	100 °C (adiabatic)

Viscosity, kinematic	1.10 cP @ 20 °C
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	Strong oxidizer
Molecular weight	34
Bulk density	Not applicable

10. STABILITY AND REACTIVITY

Reactivity Reactive and oxidizing agent.

Chemical Stability Stable under normal conditions. Decomposes on heating. Stable under recommended storage conditions.

Possibility of Hazardous Reactions Contact with organic substances may cause fire or explosion. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid Excessive heat; Contamination; Exposure to UV-rays; pH variations.

Incompatible materials Combustible materials. Copper alloys, galvanized iron. Strong reducing agents. Heavy metals. Iron. Copper alloys. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition.

Hazardous Decomposition Products Oxygen which supports combustion. Liable to produce overpressure in container.

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 50% solution: LD50 > 225 mg/kg bw (rat)
35 % solution:LD50 1193 mg/kg bw (rat)
70 % solution: LD50 1026 mg/kg bw (rat)

LD50 Dermal 35% solution: LD50 > 2000 mg/kg bw (rabbit)
70 % solution: LD50 9200 mg/kg bw (rabbit)

LC50 Inhalation 50% solution: LC50 > 170 mg/m³ (rat) (4-hr)
Hydrogen Peroxide vapors: LC0 9400 mg/m³ (mouse) (5 - 15 minutes)
Hydrogen Peroxide vapors: LC50 > 2160 mg/m³ (mouse)

Serious eye damage/eye irritation Corrosive. Risk of serious damage to eyes.
Skin corrosion/irritation Moderately irritating (rabbit).

Sensitization Did not cause sensitization on laboratory animals.

Information on toxicological effects

Symptoms Vapors, mists, or aerosols of hydrogen peroxide can cause upper airway irritation, inflammation of the nose, hoarseness, shortness of breath, and a sensation of burning or tightness in the chest. Prolonged exposure to concentrated vapor or to dilute solutions can cause irritation and temporary bleaching of skin and hair. Exposure to vapor, mist, or aerosol can cause stinging pain and tearing of eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product contains hydrogen peroxide. The International Agency for Research on Cancer (IARC) has conculded that there is inadequate evidence for carcinogenicity of hydrogen peroxide in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans). The American Conference of Governmental Industrial Hygienists (ACGIH) has concluded that hydrogen peroxide is a

'Confirmed Animal Carcinogen with Unknown Relevance to Humans' (A3).

Chemical name	ACGIH	IARC	NTP	OSHA
Hydrogen peroxide 7722-84-1	A3	3		

Mutagenicity This product is not recognized as mutagenic by Research Agencies
In vivo tests did not show mutagenic effects

Reproductive toxicity No toxicity to reproduction in animal studies.

STOT - single exposure May cause respiratory irritation.
STOT - repeated exposure Not classified.

Target organ effects Eyes, Respiratory System, Skin.

Aspiration hazard Aspiration risk: may cause lung damage if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects Hydrogen peroxide is naturally produced by sunlight (between 0.1 and 4 ppb in air and 0.001 to 0.1 mg/L in water). Not expected to have significant environmental effects.

Hydrogen peroxide (7722-84-1)				
Active Ingredient(s)	Duration	Species	Value	Units
Hydrogen peroxide	96 h LC50	Fish Pimephales promelas	16.4	mg/L
Hydrogen peroxide	72 h LC50	Fish Leuciscus idus	35	mg/L
Hydrogen peroxide	48 h EC50	Daphnia pulex	2.4	mg/L
Hydrogen peroxide	24 h EC50	Daphnia magna	7.7	mg/L
Hydrogen peroxide	72 h EC50	Algae Skeletonema costatum	1.38	mg/L
Hydrogen peroxide	21 d NOEC	Daphnia magna	0.63	mg/L

Persistence and degradability Hydrogen peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in freshwater ranged from 8 hours to 20 days, in air from 10 - 20 hours, and in soils from minutes to hours depending upon microbiological activity and metal contamination.

Bioaccumulation Material may have some potential to bioaccumulate but will likely degrade in most environments before accumulation can occur.

Mobility Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Other Adverse Effects Decomposes into oxygen and water. No adverse effects.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods Dispose of in accordance with local regulations. Can be disposed as waste water, when in compliance with local regulations.

US EPA Waste Number D001

Contaminated Packaging Dispose of in accordance with local regulations.
Drums - Empty as thoroughly as possible. Triple rinse drums before disposal. Avoid contamination; impurities accelerate decomposition. Never return product to original

container.

14. TRANSPORT INFORMATION

DOT

UN/ID no	2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

TDG

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary class	8
Packing Group	II

ICAO/IATA

Air regulation permit shipment of Hydrogen Peroxide (<=40%) in non-vented containers for Air Cargo Only aircraft, as well as for Passenger and Cargo aircraft. HOWEVER, all PeroxyChem Hydrogen Peroxide containers are vented and therefore, air shipments of PeroxyChem H2O2 are not permitted. IATA air regulations state that venting of packages containing oxidizing substances is not permitted for air transport.

IMDG/IMO

UN/ID no	UN 2014
Proper Shipping Name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
Hazard class	5.1
Subsidiary Hazard Class	8
Packing Group	II

OTHER INFORMATION

Protect from physical damage. Keep drums in upright position. Drums should not be stacked in transit. Do not store drums on wooden pallets.

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	SARA RQ
Hydrogen peroxide 7722-84-1		1000 lb	

Hydrogen Peroxide RQ is for concentrations of > 52% only

International Inventories

Component	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Hydrogen peroxide 7722-84-1 (35)	X	X	X	X	X	X	X	X	X

Mexico - Grade Serious risk, Grade 3

CANADA

WHMIS Hazard Class
C - Oxidizing materials
D1B - Toxic materials
E - Corrosive material
F - Dangerously reactive material






16. OTHER INFORMATION

NFPA	**Health Hazards** 3	**Flammability** 0	**Stability** 1	**Special Hazards** OX
HMIS	**Health Hazards** 3	**Flammability** 0	**Physical hazard** 1	**Special precautions** H

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0
Special Hazards: OX = Oxidizer
Protection = H (Safety goggles, gloves, apron, the use of supplied air or SCBA respirator is required in lieu of a vapor cartidge respirator)

Uniform Fire Code Oxidizer: Class 2--Liquid

Revision date: 2015-03-18
Revision note Initial Release

Disclaimer

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Prepared By:

PeroxyChem
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End of Safety Data Sheet

Ammonia

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : **Ammonia**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **S25164**

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Corrosive
Skin corrosion, category 1B



Environmentally Damaging
Acute hazards to the aquatic environment, category 1



Irritant
Specific target organ toxicity following single exposure, category 3

STOT SE 3
AcAq Tox 1
Skin Corr. 1B

Signal word :Danger

Hazard statements:
Causes severe skin burns and eye damage
May cause respiratory irritation
Very toxic to aquatic life
Precautionary statements:
If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use
Do not breathe dust/fume/gas/mist/vapours/spray
Avoid release to the environment
Wear protective gloves/protective clothing/eye protection/face protection
Use personal protective equipment as required

Do not eat, drink or smoke when using this product
Wash skin thoroughly after handling
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
Collect spillage
Specific treatment (see supplemental first aid instructions on this label)
Wash contaminated clothing before reuse
Store locked up
Store in a dry place
Store in a well ventilated place. Keep container tightly closed
Dispose of contents/container to ...

Combustible Dust Hazard: :
May form combustible dust concentrations in air (during processing).

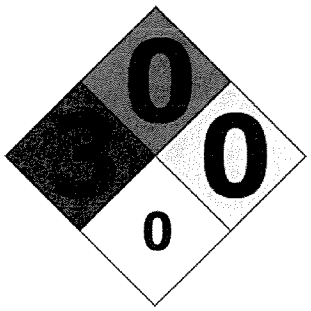
Other Non-GHS Classification:

WHMIS

E



NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 1336-21-6	Ammonium Hydroxide, ACS	12.32 %
CAS 7732-18-5	Deionized Water	87 %
		Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

a comfortable position.Seek medical advice if discomfort or irritation persists.If breathing difficult, give oxygen.

After skin contact: Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea,Headache, Shortness of breath.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.Thermal decomposition can lead to release of irritating gases and vapors.Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Advice for firefighters:

Protective equipment: Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.Use spark-proof tools and explosion-proof equipment.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Transfer to a disposal or recovery container.Use spark-proof tools and explosion-proof equipment.Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.Keep away from ignition sources. Protect from heat.Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures.Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect solids in powder form using vacuum with (HEPA filter)

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Wash hands after handling. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan.Use only in well ventilated areas.Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents.Store in cool, dry conditions in well sealed containers. Store with like hazards

SECTION 8 : Exposure controls/personal protection





Control Parameters:
1336-21-6, Ammonium Hydroxide, ACGIH TLV: 17 mg/m3
1336-21-6 , Ammonium Hydroxide , OSHA PEL: 35 mg/m3
1336-21-6, Ammonium Hydroxide, OSHA TWA 25 ppm (18 mg/m3) ST 35 ppm (27 mg/m3)
1336-21-6, Ammonium Hydroxide, ACGIH TWA 25 ppm (18 mg/m3) ST 35 ppm (27 mg/m3)

Appropriate Engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling.Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.Use under a fume hood. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment.Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Respiratory protection:
Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled.Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection:
Safety glasses with side shields or goggles.

General hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Clear, colorless liquid.	**Explosion limit lower**: **Explosion limit upper**:	Not Determined Not Determined

Ammonia

Odor:	Ammonia-like	**Vapor pressure**:	115 at 20 C
Odor threshold:	Not Determined	**Vapor density**:	3.38
pH-value:	9	**Relative density**:	0.9
Melting/Freezing point:	- 72 C	**Solubilities**:	Infinite solubility in water.
Boiling point/Boiling range:	36 C	**Partition coefficient (n-octanol/water)**:	Not Determined
Flash point (closed cup):	Not Determined	**Auto/Self-ignition temperature**:	Not Determined
Evaporation rate:	Not Determined	**Decomposition temperature**:	Not Determined
Flammability (solid,gaseous):	Not Determined	**Viscosity**:	a. Kinematic:Not Determined b. Dynamic: Not Determined
Density: 0.9 g/cm3 at 20 °C			

SECTION 10 : Stability and reactivity

Reactivity:
Chemical stability: No decomposition if used and stored according to specifications.
Possible hazardous reactions:
Conditions to avoid: Store away from oxidizing agents, strong acids or bases.
Incompatible materials: Strong oxidizers, acids, gold, mercury, halogens, silv er, calcium hypochlorite bleaches.
Hazardous decomposition products: Ammonia and nitrogen oxides.

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	LD50: 350 mg/kg (rat)	Ammonium Hydroxide (1336-21-6)
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity

Fish (acute 1336-21-6): 96 Hr LC50 Pimephales promelas: 8.2 mg/L

Persistence and degradability: Readily degradable in the environment.
Bioaccumulative potential:
Mobility in soil:
Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water.It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14 : Transport information

UN-Number

2672

UN proper shipping name

Ammonia Solution

Transport hazard class(es)



Class:
8 Corrosive substances

Packing group:III
Environmental hazard:
Transport in bulk:
Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

1336-21-6 Ammonium Hydroxide

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

1336-21-6 Ammonium Hydroxide, ACS 1000

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

1336-21-6 Ammonium hydroxide

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

Effective date : 12.31.2014
Last updated : 03.19.2015

PRODUCT NAME: SHOT SPOT
TRADE SECRET REGISTRY #307554-5079P HMIS CODES: H F R P
UN NUMBER : N/A 1 0 0 B

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: PARISER INDUSTRIES
ADDRESS : 91 MICHIGAN AVE
PATERSON, NJ 07503

EMERGENCY PHONE : 800-424-9300 **DATE PRINTED :12/8/2007**
INFORMATION PHONE : 973-569-9090 **NAME OF PREPARER : ENVIRONMENTAL DEPT**

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
		WATER	.76

*** No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. ***

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

pH 1% SOLUTION : 8.9 +/- .5
BOILING RANGE: n/a **SPECIFIC GRAVITY (H2O=1): 1.**
VAPOR DENSITY: N/A **EVAPORATION RATE: N/A**
COATING V.O.C.: NOT APPLICABLE **MATERIAL V.O.C.: NOT APPLICABLE**
SOLUBILITY IN WATER: SOLUBLE
APPEARANCE AND ODOR: CLEAR LIQUID WITH NO DISTINCT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT : **METHOD USED: n/a**
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a **UPPER: n/a**

EXTINGUISHING MEDIA:
FOR FIRES INVOLVING THIS PRODUCT, WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL MAY BE USED.

SPECIAL FIREFIGHTING PROCEDURES
WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS WHEN EITHER IN CONFINED AREAS OR EXPOSED TO COMBUSTION PRODUCTS.
USE WATER TO COOL FIRE EXPOSED CONTAINERS.

UNUSUAL FIRE AND EXPLOSION HAZARDS
FIREFIGHTERS SHOULD WEAR SELF-CONTAINED POSITIVE-PRESSURE BREATHING APPARATUS AND AVOID SKIN CONTACT

SECTION V - REACTIVITY DATA

STABILITY: STABLE
CONDITIONS TO AVOID
HEAT, SPARKS AND FLAMES

INCOMPATIBILITY (MATERIALS TO AVOID)
OXIDIZERS, ACIDS, ALKALIS LIME, AMMONIA, ORGANIC AMINES, CHLORATES, CHLORINE, SODIUM HYDROXIDE.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
CARBON DIOXIDE AND CARBON MONOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
HIGH VAPOR CONCENTRATIONS MAY CAUSE A BURNING SENSATION IN THE THROAT AND NOSE, STINGING AND WATERING IN THE EYES. AT CONCENTRATIONS WHICH CAUSE IRRITATION, DIZZINESS, FAINTING, DROWSINESS, NAUSEA AND VOMITING MAY ALSO OCCUR.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE
CONTACT WITH SOLUTION WILL CAUSE IRRITATION. MIST WILL IRRITATE OR BURN EYES.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
MAY BE ABSORBED THROUGH THE SKIN IN TOXIC OR LETHAL AMOUNTS.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE
LOW TO MODERATELY TOXIC. MAY CAUSE HEADACHE, DIZZINESS AND GASTROINTESTINAL DISTRESS.

HEALTH HAZARDS (ACUTE AND CHRONIC)
THE CHRONIC LOCAL EFFECT MAY CONSIST OF MULTIPLE AREAS OF SUPERFICIAL DESTRUCTION OF THE SKIN OR OF PRIMARY IRRITANT DERMATITIS. SIMILARLY, INHALATION OF SPRAY OR MISTS MAY RESULT IN VARYING DEGREES OF IRRITATION OR DAMAGE TO THE RESPIRATORY TRACT TISSUES.

CARCINOGENICITY: NTP CARCINOGEN: No IARC MONOGRAPHS: No OSHA REGULATED: No

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE
MAY AGGRAVATE EXISTING SKIN AND/OR EYE CONDITIONS ON CONTACT.

EMERGENCY AND FIRST AID PROCEDURES
INGESTION: IF PATIENT IS FULLY CONSCIOUS, GIVE 2 GLASSES OF WATER. INDUCE VOMITING. OBTAIN MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION IF IRRITATION PERSISTS. INHALATION: REMOVE TO FRESH AIR. EYES: FLUSH WITH WATER AND CONTINUE FLUSHING FOR 15 MINUTES. OBTAIN MEDICAL ATTENTION WITHOUT DELAY.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
IF MATERIAL IS SPILLED, SWEEP UP INTO SUITABLE DISPOSAL DRUM AND FLUSH AREA WITH WATER.

WASTE DISPOSAL METHOD
IF MATERIAL CANNOT BE SALVAGED, THE PREFERRED METHOD OF DISPOSAL IS IN A SECURE CHEMICAL LANDFILL IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
DO NOT HANDLE UNLESS THE SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. AVOID EYE AND SKIN CONTACT. AVOID INHALATION OF VAPORS. DO NOT PUNCTURE, DRAG OR SLIDE CONTAINERS. DO NOT SMOKE IN ANY CHEMICAL HANDLING OR STORAGE AREA. WASH HANDS BEFORE EATING. STORE IN A COOL, DRY AND WELL-VENTILATED LOCATION. PROTECT FROM HUMIDITY. KEEP CONTAINERS TIGHTLY CLOSED. STORE AWAY FROM INCOMPATIBLE MATERIALS.

OTHER PRECAUTIONS
USE WITH ADEQUATE VENTILATION OR LOCAL EXHAUST. STORE IN A COOL, DRY WELL VENTILATED AREA. KEEP CONTAINER CLOSED WHEN NOT IN USE.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION
NIOSH/MSHA APPROVED RESPIRATOR FOR PARTICULATES. LOCAL EXHAUST, VENTILATE AS REQUIRED.

VENTILATION
GENERAL MECHANICAL VENTILATION OR LOCAL EXHAUST SHOULD BE SUITABLE TO KEEP VAPOR CONCENTRATIONS BELOW TLV. VENTILATION EQUIPMENT SHOULD BE EXPLOSION PROOF.

PROTECTIVE GLOVES
NORMAL WORK GLOVES ARE ADEQUATE.

EYE PROTECTION
EYE GLASSES OR GOGGLES SHOULD BE WORN.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
PROTECTIVE CLOTHING MAY BE WORN, BUT IS GENERALLY NOT REQUIRED.

WORK/HYGIENIC PRACTICES
WARM WATER SHOWERING, HANDWASHING AND EYEWASH STATIONS ARE RECOMMENDED IN THE WORK AREA. THOROUGHLY WASH WITH SOAP AND WATER BEFORE HANDLING FOOD, SMOKING OR APPLYING MAKEUP. WASH CONTAMINATED CLOTHING AND DRY BEFORE REUSE.

SECTION IX - DISCLAIMER

TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE, OBTAINED FROM SOURCES BELIEVED BY PARISER INDUSTRIES, INC., TO BE ACCURATE. AS WITH ALL CHEMICALS, KEEP AWAY FROM CHILDREN, ANIMALS, AND FOOD PRODUCTS. FOR INDUSTRIAL USE ONLY, USE AS DIRECTED.

SECTION X - UN CODE

N/A

Safety Data Sheet

1. Identification

Product Name:	RAIL SLIDE
Synonyms:	NONE
CAS Number:	NONE
Product Use:	Laundry Aid
Manufacturer:	CLENACORP
Address:	1200 Industrial Road #3 San Carlos, CA 94070
General Information:	(650)591-1733
Transportation Emergency Number:	**650 759-5127**

2. Hazards Identification

GHS Classification:

Health	Environmental	Physical
Acute Toxicity - Category 5(inhalation), Category 5(oral/dermal) Eye Corrosion - Category 4 Skin Corrosion – None Skin Sensitization - None Mutagenicity - None Carcenogenicity - None Reproductive/Development - None Target Organ Toxicity (Repeated) - None	Aquatic Toxicity - Category 2	None

GHS Label:

Symbols: None	
Hazard Statements **Caution:** If inhaled: None known For skin and eyes: Nuisance, but no hazard For allergic skin reaction: None Does not cause Lung Cancer Does not cause Birth Defects Does not cause Genetic Defects Not Toxic to Aquatic Life	***Precautionary Statements*** Do not eat, drink, or use tobacco when using this product. Keep container tightly closed Keep away from heat and open flame Wear protective gloves and eye/face protection Use in a well ventilated area. Store in tightly closed container in cool/well ventilated place. Wash thoroughly after handling

Risk Codes: R36,38

Additional Information Full text of R and S phrases in section 15

GHS Labeling Symbols

Signal Word Caution

Hazard Statements

H302 Harmful if Swallowed

Precautionary Statements

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/eye protection/face protection

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P305 + P351 +P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
1. Wax Emulsion	mixture	90%
2. Teflon dispersion	none	0-10%

4. First Aid Measures

Eye: Flush with water for at least 15 minutes or until irritation ceases. If irritation persists, consult a doctor.

Skin: Wash skin thoroughly with soap and water for at least 15 minutes. Prolonged contact by sensitive individuals can cause drying.

Inhalation: Immediately remove person to fresh air. Keep person calm, if not breathing, give artificial respiration. If not breathing, give oxygen.

Ingestion: No emergency care anticipated

5. Fire Fighting Measures

Suitable Extinguishing Media: Water, Alcohol Foam, Carbon Dioxide, or Dry Chemical

Fire Fighting Procedures: Use normal firefighting equipment. Do not direct stream into burning molten material; this may cause spattering and spread the fire. Use water to cool containers. Product may float on water if spilled. Firefighters must be equipped

to prevent breathing of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion Hazards: None known.

Combustion Products: Carbon Monoxide, and Carbon Dioxide

6: Accidental Release Measures

- This product is partially soluble in water and will float on the surface.

Personal Protection for Emergency Situations:

Evacuate the area of all unnecessary personnel.

Spill Mitigation Procedures

Air Release: Not applicable

Water Release: This material is somewhat soluble in water, and it floats. If not contaminated with other chemicals, this can be disposed of in a sanitary landfill.

Land Release: Normal housekeeping procedure: Sweep or vacuum up materials and dispose of in a sanitary landfill.

Additional Spill Information:

Utilize emergency response personal protection equipment (PPE) prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Disposal Considerations.

7. Handling and Storage

Handling: Product is very slippery. Be careful of spills, even after wiping up. Wash surfaces with soap and water after cleaning.

Storage: Store product in original containers. Keep containers closed. Store in cool, well-ventilated areas. Keep away from oxidizers.

8. Exposure Controls / Personal Protection

Exposure limits:

Component 1: Wax dispersion None listed

Component 2: Teflon dispersion None listed

Personal Protective Equipment (PPE):

Eye Protection: Wear eye protection

Skin Protection: Wear gloves and aprons.

Respiratory Protection: Use in well-ventilated area.

9. Physical and Chemical Properties

Flashpoint:	370°F	**Autoignition Temperature**:	unknown
Boiling Point:	>200°F	**Melting Point**:	unknown
Vapor Pressure:	none	**Vapor Density**:	>1
% Solubility:	none	**Pour Point**:	unknown
Molecular Formula:	not applicable		
Odor and Appearance:	Thick white to gray, Fruity aroma		
Lower Explosive Limit (LEL):	Unknown	**Upper Explosive Limit (UEL)**:	unknown
Specific Gravity:	0.9-1.1	% Volatile	40%
Evaporation Rate:	Negligible	Viscosity	viscous
Octanol/Water Partition:	unknown	pH	7-9
Molecular Weight:	unknown		

10. Stability and Reactivity

Stability/Incompatibility: Product is stable. Hazardous Polymerization will not occur. Avoid Strong Oxidizing Agents.

Hazardous Reactions: None

11. Toxicological Information

Signs and Symptoms of overexposure:

Acute Effects:. Mild laxative effect

Eye Contact: May cause eye irritation

Skin Contact: None

Inhalation: None

Ingestion: May cause Nausea, vomiting and diarrhea

Target Organ Effects: None

Chronic Effects: Prolonged skin contact can lead to mild dermatitis.

Medical Conditions Aggravated: None

Acute Toxicity:

Oral LD50 (rat)	Very High	
Dermal LD50(rabbit)	None	
Inhalation LC50(rat)	unknown	
IDLH	4 hour	8 hour

12. Ecological Information

Ecotoxicological information: No data available

Bioaccumulation/Biodegradability : Bioaccumulation is not expected to be significant. This product is readily Biodegradable.

13. Disposal Considerations

As sold, this product is not a hazardous waste and can be disposed of safely in a Sanitary Landfill.

COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS

14. Transport Information

U.S. Department of Transportation (DOT)
Proper Shipping Name: Not Regulated
Hazard Class: none
UN/NA Number: None
Packing Group: None
Labels Required: None

International Maritime Organization (IMDG)
Proper Shipping Name: Not Regulated
Hazard Class: None
UN/NA Number: None

Packing Group: None
Labels Required: None

15. Regulatory Information

U.S. Federal Regulations

CERCLA. There is no designated reportable quantity (RQ) for this chemical. If appropriate, immediately report spills to the National Response Center (800/424-8802) as required by federal law. Also contact appropriate state and local regulatory agencies.
Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory
Clean Water Act (CWA): No known components in this product are hazardous substances under the Clean Water Act. Consult Federal, State and local regulations for specific requirements.
CAA (CAA): No known components in this product are hazardous substances under the Clean Air Act. Consult Federal, State and local regulations for specific requirements.

SARA	Immediate:	No
	Delayed:	No
	Fire:	No
	Pressure:	No
	Reactivity:	No

This product contains the following toxic Chemicals:

Component	**CAS number**	**Maximum**
NONE	NONE	NONE

State Regulations

California: NONE

International Regulations

Canadian Environmental Protection Act: NONE

Canadian Workplace Hazardous Materials Info Systems WHMIS

Class: None

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

EU Classification of Existing Chemicals (EINECS):

EU Classification: F None H None T None N None

EU Hazard, Precaution, Risk and Safety Phrases: **Hazard Statements**

Risk Statements

R36,38 Irritating to skin and eyes

S02 Keep out of the reach of children

S24,25 Avoid contact with skin and eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 Wear suitable clothing, gloves and eye/face protection

16. Other Information

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 1
Flammability: 1
Reactivity: 0

Revision Indicator: New SDS Date 3/15/15

Disclaimer: The information contained herein is accurate to the best of our knowledge. Clenacorp makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

PARISER INDUSTRIES

91 Michigan Avenue
Paterson, NJ 07503
(973) 569-9090 Office
(973) 569-9101 Fax
www.pariserchem.com

TECHNICAL PRODUCT BULLETIN

WCS™ Wet-Cleaning Systems

HYDROCON

Description

HYDROCON is a fabric conditioner and retexturizing agent formulated for professional wet cleaners to process textiles that require additional drape relaxation and a softer, supple hand. The product reduces static, improves stain resistance, and reduces pressing time. HYDROCON has been certified by the EPA's Safer Choice program as an environmentally-preferred wet-cleaning adjunct.

SAFER CHOICE
Meets U.S. EPA Safer Product Standards
epa.gov/saferchoice

Applications

In laundry applications, HYDROCON is added to the final rinse operation of the formula. In wet-cleaning applications, it is added to the break or the final rinse. This product also works well on rayon and linen garments which are difficult to press after aqueous processing.

Directions

- **Wet-cleaning applications:** Add to the rinse cycle at a rate of 2–3 ounces per 10 gallons of water.
- **Laundry applications (commercial machines):** Add 4–6 ounces per hundredweight (cwt) to the final rinse operation.
- **Top-loaders:** Add 1/2–2 ounces to the final rinse compartment/operation.
- **Hand washing:** In clear water, add HYDROCON at the rate of 2 ounces per gallon of rinse water and mix thoroughly. Allow fabric to soak for 3–5 minutes and mildly agitate. Squeeze out garments (DO NOT WRING) and dry/press according to label instructions.

Note

The HYDROCON formulation is a unique suspension which may likely begin to stratify over time. Generally, a shelf-life of 90–100 days can be expected from this material; however, this can be longer or shorter depending upon local environmental conditions such as intense heat or freezing. Do not use the product if it has completely separated.

Packaging

HYDROCON is available in 4 x 1-gallon cases and 5-, 15-, and 55-gallon containers.

2-1 FORMULA®

The Versatile Combination™



Combining the features of PICRIN & STREETEX, 2-1 FORMULA offers the versatility to solve a wide variety of spotting problems.

Combination Wet-Dry Spotter

Stains can be water-soluble, solvent-soluble, or both, but the nature of a stain is not always easy to determine, making it difficult to decide which spotter to use.

When you don't know what caused a stain, don't waste time with trial and error spotting. Reach for 2-1 FORMULA. It's the versatile solution for a wide variety of stains. That's because 2-1 FORMULA is a combination of two parts STREETEX® pre-spotter and one part PICRIN® volatile dry spotter. If the stain contains oil or grease, PICRIN will tackle it; if it contains water-soluble soil, the STREETEX goes to work.

- ***Versatile***

Because of its ability to attack both water-soluble and solvent-soluble stains, 2-1 FORMULA is especially useful for removing many stains containing both water-soluble and solvent-soluble components like food and perspiration. 2-1 FORMULA will do the job that would otherwise require two or more stain removal products.

- ***Effective on Embedded Soil***

No ready-made spotter is as effective as 2-1 FORMULA for brushing out embedded soil. With the application of 2-1 FORMULA on collars, cuffs, hemlines, and drape linings, recleaning can often be eliminated.

- ***Effective on Latex Paint***

Conventional oily-type paint removers, while effective on oil-based paints, do not have the same ability to remove latex paint. With 2-1 FORMULA, latex paint stains can be removed faster and more effectively than with any ready-made spotter.

- ***Removes Light Paint, Oil & Grease Stains***

2-1 FORMULA is effective on light oil and grease stains. When working with paint stains, it can be difficult to distinguish between latex and other types of paint. Because 2-1 FORMULA is effective on some oil-based paints, the formula has gained popularity as a general paint-oil-grease remover.

- ***Soluble in Water & Solvent***

Because of its dual solubility, 2-1 FORMULA can be feathered with water and steam after spotting small, isolated stains. It can also be used as a reclean formula in perc when spotting larger or wide-spread stains.

- ***Specially Marked Spotting Bottle Available Free of Charge***

Enables you to mix 2-1 FORMULA directly in the dispensing bottle without the need for other measuring aids.

STREET'S®
www.4streets.com
(800) 4-STREET

SPOTTERS

Instructions for Preparing and Using 2-1 FORMULA®

Use 2-1 FORMULA to remove these and other "mystery" stains:

- **Latex & Unknown Paint Stains**
- **Foods**
- **Gravy**
- **Sauces & Soups**
- **Light Oils**
- **Light Greases**
- **Cosmetics**
- **Inks**
- **Oil-Based Paints**
- **Embedded Soils On Collars, Cuffs, Hemlines & Drape Linings**
- **Unknown Stains**

2-1 FORMULA is safe to most fabrics and colors. If colorfastness is questionable, test garment in a hidden area.

How to Mix 2-1 FORMULA

Prepare 2-1 FORMULA by mixing two parts STREETEX® and one part PICRIN® in the specially marked spotting bottle.

1. Add STREETEX up to the level indicated on the spotting bottle.
2. Add PICRIN up to the second line.
3. Mix by covering the spout and inverting the bottle several times until a clear solution forms.

Pre-Spotting

1. Apply 2-1 FORMULA directly to the stain.
2. Work gently with spatula or tamp with spotting brush until stain is completely loosened or removed.
3. Flush with water or steam, utilizing vacuum from spotting board.
4. Remove excess moisture with air gun.
5. Apply leveling agent to control moisture:

   MultiSPOT® for perc systems
   SPOTLess hc® for hydrocarbon (HFHC) systems
   GreenSPOT™ for GreenEarth® (D5) systems
6. Dryclean as normal.

Post-Spotting

1. Apply 2-1 FORMULA directly to the stain.
2. Work gently with spatula or tamp with spotting brush until stain is completely loosened or removed.
3. Flush with water or steam, utilizing vacuum from spotting board.
4. Dry using air from spotting gun.

Note: For moisture-sensitive applications, 2-1 FORMULA can be flushed with PICRIN and then dried.

How to Order STREETEX & PICRIN

STREETEX and PICRIN are sold by authorized Street's distributors everywhere. Order STREETEX from your local distributor in single one gallon containers, cases of four, or 15 gallon drums. Order PICRIN from your local distributor in single one gallon containers or cases of four.

Specially labeled spotting bottles are available from your distributor.

Before using any chemical product, review the Material Safety Data Sheet (MSDS) for safe handling and proper disposal.

For professional drycleaning use only.

Advancing the Technology of Clean™

STREET'S®
www.4streets.com
(800) 4-STREET

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#1937 (12/12)

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CHEMICALS

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www.pariserchem.com

LAUNDRY ESP
Laundry Environmental Stewardship Program

ULTRA FRESH

TECHNICAL PRODUCT BULLETIN

DESCRIPTION

ULTRA FRESH is an economical, light duty, biodegradable liquid laundry detergent for top – loader, and small commercial washer applications. Product formulation is of a High Efficiency nature, and can be used in such applications accordingly.

ADVANTAGES

Product is safe to use on all fabrics, and controlled sudsing characteristics allow for flexibility in usage parameters.

USAGE DIRECTIONS

Top Loaders:
Light/Regular soil – 2 oz. per load
Heavy/Extra large load – 3 oz. – 4 oz. per load

PACKAGING

ULTRA FRESH is packaged in 6 x 1 gallon cases.

Niagara Spray Starch (aerosol)

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 09/19/2019 Date of Issue: 09/19/2019 Version: 3.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Niagara Spray Starch (aerosol)

Product Code: 08102, 08120, 08125, 08131, 08134, 08150, 08177, 08182, 08185, 08192, 08246, 08247, 08248, 08249, 08950

*This document is intended to be used for safety in the workplace only, and is not a consumer document.

1.2. Intended Use of the Product

Fabric finish.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Faultless Brands
1025 W 8th St.
Kansas City, MO 64101 USA
T: 1-816-842-1230
www.faultless.com

1.4. Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

Press. Gas (Liq.) H280

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :



GHS04

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated.

Precautionary Statements (GHS-US) : P410+P403 - Protect from sunlight. Store in a well-ventilated place.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Contact with gas escaping the container can cause frostbite. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)
Butane	(CAS No) 106-97-8	1 - 4
Propane	(CAS No) 74-98-6	0.1 - 1
Isobutane	(CAS No) 75-28-5	0.1 – 0.5
Polyethylene glycol	(CAS No) 25322-68-3	< 0.1

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200]. A range of concentration as prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If frostbite or freezing occurs, immediately flush with plenty of lukewarm water to GENTLY warm the affected area. Do not use hot water. Do not rub affected area. Get immediate medical attention.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists. Thaw frosted parts with lukewarm water. Do not rub affected area. Get immediate medical advice/attention.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Contact with gas escaping the container can cause frostbite.

Inhalation: Contains a small amount of gases that are simple asphyxiants. If a large amount of gas is released in a confined space, gas could be toxic as a simple asphyxiant by displacing oxygen from the air. Prolonged exposure may cause irritation.

Skin Contact: May cause an allergic reaction in sensitive individuals. Contact with gas escaping the container can cause frostbite and freeze burns.

Eye Contact: Contact with gas escaping the container can cause frostbite, freeze burns, and permanent eye damage.

Ingestion: Not considered a potential route of exposure, but contact with gas escaping the container can cause freeze burns and frostbite.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire. Water spray, dry chemical, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: In accordance with subsections 31.4 and 31.5 of the UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, for Ignition distance test, and Enclosed space ignition test this material is not classified as a flammable aerosol.

Explosion Hazard: Container may explode in heat of fire.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition. Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO_2). Nitrogen oxides. Sodium oxides. Formaldehyde. Will decompose above 150 °C (> 300 °F) releasing formaldehyde vapors.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, gas). Keep away from open flames, hot surfaces and sources of ignition.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel, isolate, and ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Stop leak, if possible without risk. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Isolate area until gas has dispersed. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Do not pressurize, cut, or weld containers. Ruptured cylinders may rocket. Contact with the product may cause cold burns or frostbite.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing gas.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep only in original container. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Products: Strong acids, strong bases, strong oxidizers. Water reactive materials. Chlorine.

7.3. Specific End Use(s)

Fabric finish.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Polyethylene glycol (25322-68-3)		
USA AIHA	WEEL TWA (mg/m³)	10 mg/m³ (MW>200, aerosol)
Butane (106-97-8)		
Mexico	OEL TWA (mg/m³)	1900 mg/m³
Mexico	OEL TWA (ppm)	800 ppm
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
Alberta	OEL TWA (ppm)	1000 ppm
British Columbia	OEL STEL (ppm)	750 ppm
British Columbia	OEL TWA (ppm)	600 ppm
Manitoba	OEL STEL (ppm)	1000 ppm

New Brunswick	OEL TWA (mg/m³)	1900 mg/m³
New Brunswick	OEL TWA (ppm)	800 ppm
Newfoundland & Labrador	OEL STEL (ppm)	1000 ppm
Nova Scotia	OEL STEL (ppm)	1000 ppm
Nunavut	OEL STEL (mg/m³)	2576 mg/m³
Nunavut	OEL STEL (ppm)	1000 ppm
Nunavut	OEL TWA (mg/m³)	1901 mg/m³
Nunavut	OEL TWA (ppm)	800 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Ontario	OEL STEL (ppm)	1000 ppm
Ontario	OEL TWA (ppm)	800 ppm
Prince Edward Island	OEL STEL (ppm)	1000 ppm
Québec	VEMP (mg/m³)	1900 mg/m³
Québec	VEMP (ppm)	800 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm
Yukon	OEL STEL (mg/m³)	1600 mg/m³
Yukon	OEL STEL (ppm)	750 ppm
Yukon	OEL TWA (mg/m³)	1400 mg/m³
Yukon	OEL TWA (ppm)	600 ppm

Propane (74-98-6)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1800 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	2100 ppm (10% LEL)
Alberta	OEL TWA (ppm)	1000 ppm
British Columbia	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Québec	VEMP (mg/m³)	1800 mg/m³
Québec	VEMP (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm

Isobutane (75-28-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm
Manitoba	OEL STEL (ppm)	1000 ppm
Newfoundland & Labrador	OEL STEL (ppm)	1000 ppm
Nova Scotia	OEL STEL (ppm)	1000 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Ontario	OEL STEL (ppm)	1000 ppm
Ontario	OEL TWA (ppm)	800 ppm
Prince Edward Island	OEL STEL (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use explosion-proof equipment. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves. If material is cold, wear thermally resistant protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Thermal Hazard Protection: Wear thermally resistant protective clothing.

Other Information: When using, do not eat, drink or smoke

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Clear to hazy aerosol
Odor	:	Not available
Odor Threshold	:	Not available
pH	:	9 - 10
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	212 °F (100 °C)
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	1 g/ml
Solubility	:	Not available
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosive Properties	:	Contains gas under pressure; may explode if heated
Explosion Data - Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data - Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Contains gas under pressure; may explode if heated.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Water reactive materials. Chlorine.

10.6. Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

pH: 9 - 10

Serious Eye Damage/Irritation: Not classified

pH: 9 - 10

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Contains a small amount of gases that are simple asphyxiants. If a large amount of gas is released in a confined space, gas could be toxic as a simple asphyxiant by displacing oxygen from the air. Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic reaction in sensitive individuals. Contact with gas escaping the container can cause frostbite and freeze burns.

Symptoms/Injuries After Eye Contact: Contact with gas escaping the container can cause frostbite, freeze burns, and permanent eye damage.

Symptoms/Injuries After Ingestion: Not considered a potential route of exposure, but contact with gas escaping the container can cause freeze burns and frostbite.

Chronic Symptoms: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Polyethylene glycol (25322-68-3)	
LD50 Oral Rat	47000 mg/kg
LD50 Dermal Rabbit	> 20 ml/kg
Butane (106-97-8)	
LC50 Inhalation Rat	30957 mg/m³ (Exposure time: 4 h)
Propane (74-98-6)	
LC50 Inhalation Rat	658 mg/l/4h
Isobutane (75-28-5)	
LC50 Inhalation Rat	658 mg/l/4h
LC50 Inhalation Rat	11000 ppm

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

12.2. Persistence and Degradability

Niagara Spray Starch (aerosol)

Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Niagara Spray Starch (aerosol)	
Bioaccumulative Potential	Not established.
Butane (106-97-8)	
Log Pow	2.89
Propane (74-98-6)	
Log Pow	2.3
Isobutane (75-28-5)	
BCF Fish 1	1.57 - 1.97
Log Pow	2.88 (at 20 °C)

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions. Do not puncture or incinerate container.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name : AEROSOLS non-flammable, (each not exceeding 1 L capacity)
Hazard Class : 2.2
Identification Number : UN1950
Label Codes : 2.2



ERG Number : 126

Shipped under 49 CFR, Packaging Exception 173.306 - Consumer Commodities, Limited Quantities of Compressed Gases

14.2. In Accordance with IMDG

Proper Shipping Name : AEROSOLS non-flammable, (each not exceeding 1 L capacity)
Hazard Class : 2
Division : 2.2
Identification Number : UN1950
Label Codes : 2.2
EmS-No. (Fire) : F-D
EmS-No. (Spillage) : S-U



14.3. In Accordance with IATA

Proper Shipping Name : AEROSOLS, NON-FLAMMABLE
Identification Number : UN1950
Hazard Class : 2
Label Codes : 2.2
Division : 2.2
ERG Code (IATA) : 2L



14.4. In Accordance with TDG

Proper Shipping Name : AEROSOLS non-flammable
Hazard Class : 2.2
Identification Number : UN1950
Label Codes : 2.2



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Niagara Spray Starch (aerosol)	
SARA Section 311/312 Hazard Classes	Sudden release of pressure hazard

Polyethylene glycol (25322-68-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Butane (106-97-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Propane (74-98-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Isobutane (75-28-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State Regulations

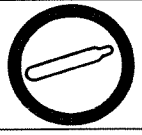
Butane (106-97-8)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Propane (74-98-6)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

Isobutane (75-28-5)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

Niagara Spray Starch (aerosol)	
WHMIS Classification	Class A - Compressed Gas



Polyethylene glycol (25322-68-3)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Butane (106-97-8)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas

Propane (74-98-6)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class A - Compressed Gas Class B Division 1 - Flammable Gas

Isobutane (75-28-5)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class A - Compressed Gas

	Class B Division 1 - Flammable Gas

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 09/19/2019 – updated responsible party contact information

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Press. Gas (Liq.)	Gases under pressure Liquefied gas
H280	Contains gas under pressure; may explode if heated

Party Responsible For The Preparation Of This Document

Faultless Brands: 1-816-842-1230 (for product information), 1-800-424-9300 (for emergencies)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS

THE CLOROX COMPANY

SAFETY DATA SHEET

Issuing Date August 24, 2015 **Revision Date** New **Revision Number** 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name **Clorox® Performance Bleach**

Other means of identification

EPA Registration Number 5813-102

Recommended use of the chemical and restrictions on use

Recommended use Disinfecting, sanitizing, and laundry bleach

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address
The Clorox Company
1221 Broadway
Oakland, CA 94612

Phone: 1-510-271-7000

Emergency telephone number

Emergency Phone Numbers For Medical Emergencies, call: 1-800-446-1014
For Transportation Emergencies, call Chemtrec: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

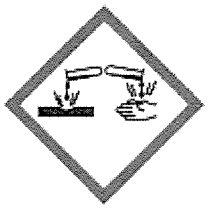
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

GHS Label elements, including precautionary statements

Emergency Overview

Signal word **Danger**

Hazard Statements
Causes severe skin burns and eye damage
Causes serious eye damage



Appearance Clear, pale yellow **Physical State** Thin liquid **Odor** Bleach

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves, protective clothing, face protection, and eye protection such as safety glasses.

Precautionary Statements - Response

Immediately call a poison center or doctor.
If swallowed: Rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Wash contaminated clothing before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Specific treatment (see supplemental first aid instructions on this label).
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents in accordance with all applicable federal, state, and local regulations.

Hazards not otherwise classified (HNOC)

Although not expected, heart conditions or chronic respiratory problems such as asthma, chronic bronchitis, or obstructive lung disease may be aggravated by exposure to high concentrations of vapor or mist.

Product contains a strong oxidizer. Always flush drains before and after use.

Unknown Toxicity
Not applicable.

Other information
Very toxic to aquatic life with long lasting effects.

Interactions with Other Chemicals
Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Sodium hypochlorite	7681-52-9	5 - 10	*

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General Advice Call a poison control center or doctor immediately for treatment advice. Show this safety data sheet to the doctor in attendance.

Eye Contact Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation Move to fresh air. If breathing is affected, call a doctor.

Ingestion Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

Protection of First-aiders Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects Burning of eyes and skin.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from the Chemical
This product causes burns to eyes, skin, and mucous membranes. Thermal decomposition can release sodium chlorate and irritating gases and vapors.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. Use personal protective equipment as required. For spills of multiple products, responders should evaluate the MSDSs of the products for incompatibility with sodium hypochlorite. Breathing protection should be worn in enclosed and/or poorly-ventilated areas until hazard assessment is complete.

Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental Precautions This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams. See Section 12 for ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Store away from children. Reclose cap tightly after each use. Store this product upright in a cool, dry area, away from direct sunlight and heat to avoid deterioration. Do not contaminate food or feed by storage of this product.

Incompatible Products Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium hypochlorite 7681-52-9	None	None	None

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection If splashes are likely to occur: Wear safety glasses with side shields (or goggles) or face shield.

Skin and Body Protection Wear rubber or neoprene gloves and protective clothing such as long-sleeved shirt.

Respiratory Protection If irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods. Remove and wash contaminated clothing before re-use. Do not eat, drink, or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State	Thin liquid		
Appearance	Clear	**Odor**	Bleach
Color	Pale yellow	**Odor Threshold**	No information available

Property	**Values**	**Remarks/ Method**
pH	~12	None known
Melting/freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	Not flammable	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper flammability limit	No data available	None known
Lower flammability limit	No data available	None known
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	~1.1	None known
Water Solubility	Soluble	None known
Solubility in other solvents	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive Properties	Not explosive	
Oxidizing Properties	No data available	

Other Information

Softening Point	No data available
VOC Content (%)	No data available
Particle Size	No data available
Particle Size Distribution	No data available

10. STABILITY AND REACTIVITY

Reactivity
Reacts with other household chemicals such as toilet bowl cleaners, rust removers, acids, or products containing ammonia to produce hazardous irritating gases, such as chlorine and other chlorinated compounds.

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
None known based on information supplied.

Incompatible materials
Toilet bowl cleaners, rust removers, acids, and products containing ammonia.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information .

Inhalation Exposure to vapor or mist may irritate respiratory tract and cause coughing. Inhalation of high concentrations may cause pulmonary edema.

Eye Contact Corrosive. May cause severe damage to eyes.

Skin Contact May cause severe irritation to skin. Prolonged contact may cause burns to skin.

Ingestion Ingestion may cause burns to gastrointestinal tract and respiratory tract, nausea, vomiting, and diarrhea.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hypochlorite 7681-52-9	8200 mg/kg (Rat)	>10000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes. May cause burns to eyes. May cause redness or burns to skin. Inhalation may cause coughing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium hypochlorite 7681-52-9	-	Group 3	-	-

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.
Chronic Toxicity Carcinogenic potential is unknown.
Target Organ Effects Respiratory system, eyes, skin, gastrointestinal tract (GI).

Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)
54 g/kg
ATEmix (inhalation-dust/mist)
58 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity
Very toxic to aquatic life with long lasting effects.

This product is toxic to fish, aquatic invertebrates, oysters, and shrimp. Do not allow product to enter storm drains, lakes, or streams.

Persistence and Degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Dispose of in accordance with all applicable federal, state, and local regulations. Do not contaminate food or feed by disposal of this product.

Contaminated Packaging
Do not reuse empty containers. Dispose of in accordance with all applicable federal, state, and local regulations.

14. TRANSPORT INFORMATION

DOT	Not restricted.
TDG	Not restricted for road or rail.
ICAO	Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.
IATA	Not restricted, as per Special Provision A197, Environmentally Hazardous Substance exception.
IMDG/IMO	Not restricted, as per IMDG Code 2.10.2.7, Marine Pollutant exception.

15. REGULATORY INFORMATION

Chemical Inventories

TSCA	All components of this product are either on the TSCA 8(b) Inventory or otherwise exempt from listing.
DSL/NDSL	All components are on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite 7681-52-9	100 lb			X

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sodium hypochlorite 7681-52-9	100 lb	-	RQ 100 lb final RQ RQ 45.4 kg final RQ

EPA Statement
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

> **DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear and rubber gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the restroom. Avoid breathing vapors and use only in a well-ventilated area.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Sodium hypochlorite 7681-52-9	X	X	X	X	
Sodium chlorate 7775-09-9	X	X	X		

International Regulations

Canada
WHMIS Hazard Class
E - Corrosive material



16. OTHER INFORMATION

NFPA	**Health Hazard**	3	**Flammability** 0	**Instability** 0		**Physical and Chemical Hazards**	-
HMIS	**Health Hazard**	3	**Flammability** 0	**Physical Hazard** 0		**Personal Protection**	B

Prepared By
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Revision Date New

Revision Note New

Reference 1279533/164964.001

General Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

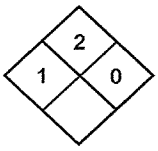
MATERIAL SAFETY DATA SHEET

PRODUCT RELEASE

Adco™

NFPA HAZARD RATINGS*

Health	1	Slight health hazard
Fire	2	Moderately combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Laundry degreaser
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Ethylene glycol monobutyl ether	<20	111-76-2	25 ppm TWA	oral : 470 mg/kg (rat)
				dermal: 200 mg/kg (rabbit)
Terpene hydrocarbons	<5	5989-27-5	100 ppm TWA	oral: 5 g/kg (rat)
				dermal: 5 g/kg (rabbit)

SECTION 3: PHYSICAL DATA

Appearance: Clear, light yellow liquid
Odor: Citrus
Specific Gravity (20° C): 0.993
pH (20:80 in IPA/H_2O Soln.): 6.5-7.0
Boiling Point: No data
Solubility in Water: Forms emulsion
Vapor Pressure (mm Hg): No data
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): 158 (PM)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Dry chemical, carbon dioxide, foam, water fog
Special Fire Fighting Procedures: Avoid directing strong water stream into product - may generate foam
Unusual Fire and Explosion Hazards: High heat may produce noxious decomposition products

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: High heat
Incompatibility (materials to avoid): Strong oxidizers, strong alkalis
Hazardous Decomposition Products: Amines, ammonia, and irritating fumes
Hazardous Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Low
Effects of Overexposure:
Acute: May cause drying or irritation if splashed into eyes or on prolonged or repeated contact with skin.
Chronic: None
Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
25 ppm TWA (ethylene glycol monobutyl ether), 100 ppm TWA (terpene hydrocarbons)	Slight eye and skin	None known	No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.

Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in plastic or lined metal containers. Use plastic or stainless steel drum pump.

SPILL OR LEAK PROCEDURES: Small spills may be flushed to sewer with water. Larger spills - soak up on absorbent material and transfer to containers for disposal as nonhazardous waste.

WASTE DISPOSAL METHOD: Flush to sewer or dispose of material and container in municipal landfill in compliance with local, state, and federal regulations.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

May cause irritation if splashed into eyes. May cause skin irritation on prolonged contact.

FIRST AID:

In case of contact with eyes, flush for 15 minutes with water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: No treatment necessary.

Eyes: Flush eyes for 15 minutes with water.

Skin: Wash off of skin with soap and water.

Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does not contain any components which are under the reporting requirements of SARA Title III, Section 313.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 19, 2010

Replaces MSDS of: November 7, 2008

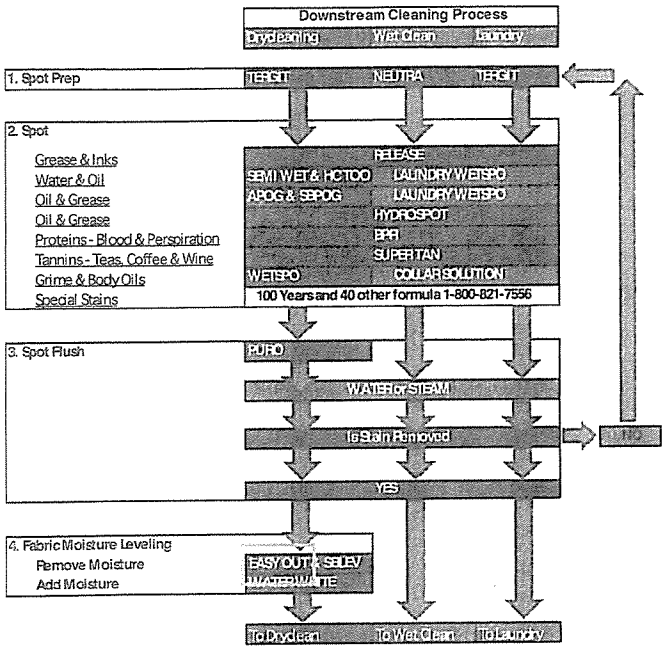
STAIN REMOVAL

Easy-Out

Leveling Agent & Silk Prespotter

Adco
QUALITY • INTEGRITY • DEPENDABILITY

Spotting Process - Brand Selection



Easy-Out

SPOTTER & LEVELING AGENT FOR WATER-SENSITIVE FABRICS

(Brightly Colored Silks - Rayons - Acetates)
Penetrates - Softens - Levels
Can Be Used With Perchloroethylene, Petroleum and Hydrocarbon Systems.
Ready to Use - Safe But Effective

DIRECTIONS FOR USE:

To condition soil and stains for removal in the wheel or level spotting rings.

1. Spray (or apply with brush or sponge) soiled area lightly until damp - do NOT soak or allow to drip or run.
2. Set garment aside for 10 to 20 minutes.
3. Clean garment before area dries out.

As A Spotting Agent On Heavy Soil:

1. Apply EASY OUT directly to fabric. Completely saturate stained area.
2. Work into the stain by lightly tamping with a dryside brush or terry gently with spatula.
3. When soil is loosened, flush with PURO into towel or spotting board.
4. Feather and dry or moisten stained area again with EASY OUT, allow to hang 10 to 20 minutes, then clean garment before area dries out.

OSHA INFORMATION

EASY OUT is proprietary mixture. See MSDS for handling and disposal instructions.



NFPA Hazard Ratings:
1-Slight health hazard
2-Moderately combustible
0-Stable

CAUTION: Moderately combustible - Keep away from heat or open flame. Avoid prolonged breathing of vapors. Contact will stain may cause irritation. Harmful if swallowed.
FIRST AID: Flush with water. DO NOT induce vomiting. If ingested, call physician.

Adco
QUALITY • INTEGRITY • DEPENDABILITY

Adco Spotting System

Adco's stain spotting system, depicted in the flow chart above, demonstrates the relationship of the spotting chemicals used to:

1. prepare the garment
2. spot the garment
3. flush out the spotting agent
4. stabilize the garments moisture

Red products are for use in dry cleaning only, blue products are designed for wet cleaning or laundry only, and purple products can be used for either water or solvent based processing.

Easy Out, encircled in the chart above, is used to stabilize the garment's moisture prior to dry cleaning

Easy Out

		Code	Description
Spotter			
	Cleaning	S - HP	Perc or Hydrocarbon
		SP - 8	Levelling Agent
	Spotting	SP - 9	Spray Spotter
Economics			
		T - 1	Integrated Savings

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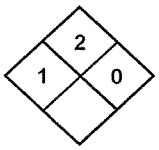
MATERIAL SAFETY DATA SHEET

PRODUCT **EASY OUT**

Adco™

NFPA HAZARD RATINGS*

Health	1	Slight health hazard
Fire	2	Moderately combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Spot removal & leveling agent for water sensitive drycleanable fabrics. For use in drycleaning only.
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Synthetic isoparaffinic hydrocarbon	60-70	68551-17-7	300 ppm TWA (recommended)	oral: 34.6 g/kg (rat)

SECTION 3: PHYSICAL DATA

Appearance: Clear, yellow liquid
Odor: Bland
Specific Gravity (20° C): 0.829
pH (20:80 in IPA/H_2O Soln.): 6.7-7.3
Boiling Point: No data
Solubility in Water: Dispersible
Vapor Pressure (mm Hg): No data
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): 157 (PM)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Dry chemical, carbon dioxide, water fog
Special Fire Fighting Procedures: Avoid directing strong water stream into product - may generate foam
Unusual Fire and Explosion Hazards: High heat may produce noxious decomposition product

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: High heat
Incompatibility (materials to avoid): Strong oxidizers, strong alkalis
Hazardous Decomposition Products: Amines, ammonia, and irritating fumes
Hazardous Polymerization: Will not occur

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Low

Effects of Overexposure:
Acute: Causes drying and irritation in eyes or on prolonged contact with skin.
Chronic: None

Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
300 ppm TWA recommended (synthetic isoparaffinic hydrocarbon)	Very slight eye and skin	None reported	No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
None effects reported	None effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.
When cleaning up large spills in confined areas, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.
Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in plastic or lined metal containers. Use plastic or stainless steel drum pump.

SPILL OR LEAK PROCEDURES: Small spills may be flushed to sewer with water. Larger spills - soak up on absorbent material and transfer to containers for disposal.

WASTE DISPOSAL METHOD: Flush to sewer or dispose of material and container in nonhazardous municipal landfill in compliance with all local, state, and federal regulations.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:
Splashing into eyes or prolonged or repeated contact with skin may cause irritation.

FIRST AID:
In case of contact with eyes, flush 15 minutes with water. Wash off of skin. If swallowed, do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: No treatment necessary.
Eyes: Flush eyes 15 minutes with water.
Skin: Wash off of skin with soap and water.

Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 16, 2010

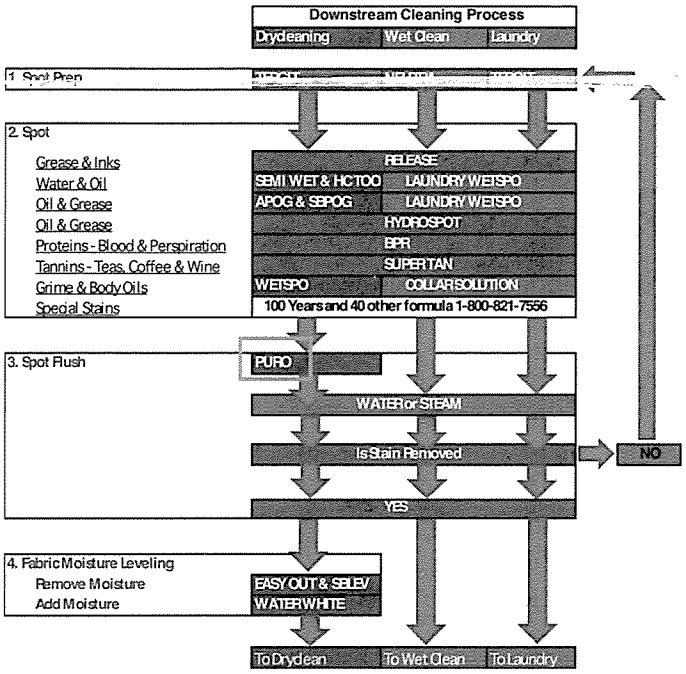
Replaces MSDS of: Novemver 7, 2008

STAIN REMOVAL

Puro

Volatile Dry Solvent

Spotting Process - Brand Selection



PURO

VOLATILE DRY SOLVENT

A quick-penetrating, quick-evaporating solvent, excellent for "touch-ups" and removal of greasy, oily soil. SAFE FOR ALL FABRICS.

1

CAUTION: SLIGHTLY COMBUSTIBLE - Use with adequate ventilation. Vapors may cause dizziness, nausea, or eye irritation. Contact with eyes, or skin may cause irritation. Harmful if swallowed.

FIRST AID: Remove person overcome by vapors to fresh air. Flush eyes 15 minutes with water; wash off of skin. If swallowed, DO NOT induce vomiting. Call a physician.

Adco Spotting System

Adco's stain spotting system, depicted in the flow chart above, demonstrates the relationship of the spotting chemicals used to:

1. prepare the garment
2. spot the garment
3. flush out the spotting agent
4. stabilize the garments moisture

Red products are for use in dry cleaning only, blue products are designed for wet cleaning or laundry only, and purple products can be used for either water or solvent based processing.

Puro, encircled in the chart above, is used to flush dry clean only spotting agents, as indicated by the red.

Puro

		Code	Description
Spotter			
	Cleaning	S - HP	Perc or Hydrocarbon
		S - G	Green Earth
	Spotting	S - 1	Solvent
Economics			
		T - 1	Integrated Savings

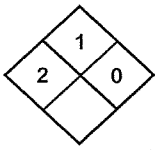
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MATERIAL SAFETY DATA SHEET

PRODUCT PURO

NFPA HAZARD RATINGS*

Health	2	Moderate health hazard
Fire	1	Slightly combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Stain removal agent for use in drycleaning only.
Synonyms: Volatile dry solvent, VDS

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Trichloroethylene	<100	79-01-6	50 ppm TWA	oral: 4920 mg/kg (rat)

SECTION 3: PHYSICAL DATA

Appearance: Colorless Liquid
Odor: Sweet, like ether
Specific Gravity (20° C): 1.462
pH: Not applicable
Boiling Point: 189°F
Solubility in Water: 0.1g/100g @ 20°C
Vapor Pressure (mm Hg): 60 @ 20°C
Vapor Density: Heavier than air

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): >230 (TCC)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Self-extinguishing
Special Fire Fighting Procedures: Use water spray to keep fire-exposed containers cool. Wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapors may develop a flammable atmosphere in confined areas. May decompose to hydrochloric acid at high temperatures in fire.

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: High temperatures may induce thermal decomposition. Avoid open flames. Welding arcs should not be used.
Incompatibility (materials to avoid): Strong oxidizers. aluminum, or zinc coated containers.
Hazardous Decomposition Products: Hydrogen chloride, phosgene, and other toxic fumes may be produced on burning vapors.

Hazardous Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Very low: oral LD 50: >4920 mg/kg skin absorption

Effects of Overexposure:
Acute: Contact with eyes, prolonged or repeated contact with skin may cause irritation, redness, and drying. Breathing a high concentration of vapors may cause irritation of the nose and throat, dizziness, nausea, or loss of coordination.
Chronic: None

Carcinogenicity: Trichloroethylene component rated "2A" IARC - "C" NTP - human carcinogen on CA list

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
50 ppm TWA (trichloroethylene)	Slight eye and skin	None known	Trichloroethylene component rated "2A" IARC - "C" NTP - human carcinogen on CA list
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.
When cleaning up large spills in confined area, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.
Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in closed containers in a well ventilated area. Aluminum equipment should not be used for storage or transfer. Keep containers closed when not in use.

SPILL OR LEAK PROCEDURES: Small spills - wipe up. Large spills - soak up on absorbent material and transfer into resealable containers for disposal.

WASTE DISPOSAL METHOD: Liquid product or absorbents containing this product must be disposed on in accordance with applicalbe local, state and federal regulations for chlorinated hydrocarbons.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Use with adequate ventilation. Avoid contact with skin and eyes. Avoid prolonged breathing of vapors. Harmful if swallowed.

FIRST AID:

If overcome be vapors, remove person to fresh air. In case of contact with eyes, flush for 15 minutes with water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting. Call physician immediately.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove person overcome by vapors to fresh air.
Eyes: Flush eyes for 15 minutes with water.
Skin: Wash off of skin with soap and water.

Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 19, 2010

Replaces MSDS of: November 7, 2008

MATERIAL SAFETY DATA SHEET

PRODUCT Swan-Cote

HMIS HAZARD RATINGS‡

Health	2
Flammability	4
Physical hazards	1

Laidlaw

Adco™

SECTION 1: PRODUCT INFORMATION

Manufacturer: Adco Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Fabric Protectant
Synonyms:

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Acetone	35-40	67-64-1	750 ppm TWA	
Heptane	25-30	142-82-5	500 ppm	
Butane	15-20	106-97-8	800 ppm TWA	
Propane	10-15	74-98-6	1000 ppm TWA	

SECTION 3: PHYSICAL DATA

Appearance: Aerosol spray
Odor: Solvent
Specific Gravity (20° C): Not determined
pH: No data
Boiling Point: No data
Solubility in Water: No data
Vapor Pressure (mm Hg): No data
Vapor Density: Not determined

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): Not determined
Upper Flammable Limit: 12.80%
Lower Flammable Limit: 1.20%
Extinguishing Media: Alcohol foam, CO_2, Dry chemical, foam or water fog
Special Fire Fighting Procedures: Water may be used to cool closed containers to prevent pressure build up and possible autoignition or explosion when exposed to extreme heat.
Unusual Fire and Explosion Hazards: Material is highly volatile and readily gives off vapors which may travel along the ground and be ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharges or other ignition source distant from the handling point.

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Heat, sparks or open flames
Incompatibility (materials to avoid): Avoid contact with strong oxidizing agents, strong alkalis and strong mineral acids. caustic soda, caustic potash, or oxidizers as they may react violently.
Hazardous Decomposition Products: Burning can produce carbon monoxide and/or carbon dioxide and traces of phosgene gas
Hazardous Polymerization: Will not occur

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Slightly toxic

Effects of Overexposure:
Acute: Can cause severe irritation and burning in eyes and on skin. Contact can cause frostbite. Breathing high concentrations can cause dizziness, headache, nausea and loss of coordination. Continued inhalation may lead to unconsciousness and death. An asphyxiate.
Chronic: May result in kidney and liver damage.

Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

‡Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
500 ppm (Heptane), 750 ppm TWA (Acetone), 800 ppm TWA (Butane), 1000 ppm TWA (Propane)	Severe eye and skin	None reported	No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: If necessary, use OSHA/NIOSH approved respirator.

Ventilation: General ventilation may be adequate for maintaining airborne concentrations below established exposure limits. If general ventilation is inadequate, supplemental local exhaust may be required. Where explosive mixture may be present, systems safe for such locations should be used.

Protective Gloves: Chemical resistant gloves are recommended.

Eye Protection: Chemical safety glasses or goggles.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Keep containers tightly closed. Isolate from heat, sparks and open flames. Closed containers may explode when exposed to extreme heat. Do not store in direct sunlight, near open flames/sparks or at temperatures exceeding 120°F.

SPILL OR LEAK PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Ventilate area and eliminate all ignition sources. Clean up with inert materials and dispose of in accordance with all local, state and federal regulations. Do not discharge effluent of this product into lakes, streams or other waters.

WASTE DISPOSAL METHOD: Dispose of this product in accordance with all local, state, and federal regulations. Empty aerosol containers may be disposed of through normal channels. Full or partially full containers are considered hazardous waste and must be disposed of accordingly.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

EXTREMELY FLAMMABLE - CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Do not expose to heat or open flames or store at temperatures over 120°F. Avoid spraying into eyes or onto skin.

FIRST AID:

Remove person overcome by vapors to fresh air. If breathing has stopped, qualified personnel should administer artificial respiration. Flush eyes for at least 20 minutes with large amounts of water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting. Immediately drink two glasses of water and get medical attention.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove persons overcome by vapors to fresh air. If breathing has stopped, qualified personnel should administer artificial respiration.

Eyes: Flush with large amounts of water for at least 20 minutes, lifting upper and lower lids occasionally. Get medical attention.

Skin: Thoroughly wash exposed skin with soap and water.

Ingestion: If swallowed, DO NOT induce vomiting. Immediately drink two glasses of water. Never give anything to an unconscious person. Get medical attention.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable quantities.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 22, 2010

Replaces MSDS of: June 19, 2008

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sunshine Fresh

OTHER MEANS OF IDENTIFICATION: Not applicable.

GENERAL USE: For professional drycleaning use only

PRODUCT DESCRIPTION: Deodorant and Fragrance

MANUFACTURER

Adco Professional Products LLC
1706 Ledo Rd.
Albany, GA 31707
Product Information: 800-821-7556 (USA & Canada only)

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada only) **or** 651-632-9272

Transportation Emergency: 800-424-9300 (USA & Canada only) **or** 703-527-3887

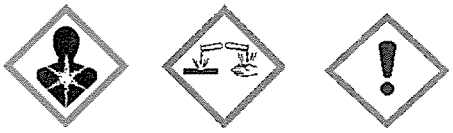
2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Flammable Liquids: Category 4
Aspiration Hazard: Category 1
Skin Corrosion/Irritation: Category 2
Sensitization – Skin: Category 1
Eye Damage/Irritation: Category 1
Carcinogenicity: Category 2

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H227 – Combustible liquid.
H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H317 – May cause allergic skin reaction.
H318 – Causes serious eye damage.
H351 – Suspected of causing cancer.

Precautionary Statements:

P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and are understood.
P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 – Wash hands thoroughly after handling.
P272 – Contaminated work clothing should not be allowed out of the workplace.
P280 – Wear protective gloves/protective clothing/eye protection/ face protection.

P301+P310+P331 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338+P310 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contacts if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P308+P313 – If exposed or concerned: Get medical advice/attention.
P333+P313 – IF SKIN irritation or rash occurs: Get medical advice/attention.
P363 – Wash contaminated clothes before reuse.
P370+P378 – In case of fire: Use water fog or fine spray, foam, carbon dioxide extinguishers, or dry chemical extinguishers for extinction.
P403+P235 – Store in a well-ventilated place. Keep cool.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards: Not available.
Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identity of one or more components of this product are withheld as a trade secret.

Chemical Name	Wt.%	CAS#
Trade Secret #1	-	-
Trade Secret #2	-	-

Comments: None.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with soap and water. Consult a physician if irritation persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation.

SKIN: Dryness.

SKIN ABSORPTION: Insufficient data available.

INGESTION: No data available.

INHALATION: No data available.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NFPA Class IIIA.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Contain spill. Avoid breathing vapor. Clean up spills immediately with absorbent material, observing precautions in the Exposure Controls/Personal Protection section (see section 8). Place absorbed material in closed containers for disposal (see section 13). Do not flush to sewer. Avoid contamination of ground and surface waters.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks and flame.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers in a cool, well-ventilated area.

ELECTROSTATIC ACCUMULATION HAZARD: Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3
Trade Secret #1	**TWA**	100		NE			
	STEL	NE[1]		NE			
Trade Secret #2	**TWA**	NE		NE			
	STEL	NE		NE			

TABLE FOOTNOTES:

1. NE=Not established.

The specific identities of one or more components of this product are withheld as a trade secret.

ENGINEERING CONTROLS: Good general ventilation should be sufficient to control airborne levels.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Neoprene or Barrier™ gloves.

RESPIRATORY: : NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Where contact is likely, wear the appropriate chemical resistant equipment, which depending on circumstances may include gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear.

PHYSICAL STATE: Liquid.

COLOR: Colorless to light yellow.

ODOR: Sweet citrus.

ODOR THRESHOLD: No data available.

pH: No data available.

FREEZING POINT: No data available.

INITIAL BOILING POINT: No data available

FLASHPOINT: >137 (TCC).

EVAPORATION RATE: No data available.

FLAMMABILITY (Solid, Gas): Not applicable, this product is a liquid at room temperature.

FLAMMABLE LIMITS: Upper limit: 6%, Lower limit: 1%.

VAPOR PRESSURE: 0.5 mm Hg at 20°C

VAPOR DENSITY: No data available.

RELATIVE DENSITY: 0.77

SOLUBILITY IN WATER: Insoluble.

PARTITION COEFFICIENT (Log K_{ow}): No data available.

AUTOIGNITION TEMPERATURE: Not available.

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: 2 cP

PERCENT VOLATILE: 100

10. STABILITY AND REACTIVITY

REACTIVITY: No

CHEMICAL STABLITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.

CONDITIONS TO AVOID: Use or storage above 120°F.

INCOMPATIBLE MATERIALS: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Burning produces toxic vapors.

11. TOXICOLOGICAL INFORMATION

ROUTES OF ENTRY: Inhalation and skin.

ACUTE TOXICITY (ATE)

DERMAL LD_{50}: > 2,000 mg/kg (rabbit)

ORAL LD_{50}: > 2,000 mg/kg (rat)

INHALATION LC_{50}: Insufficient data available.

CHRONIC TOXICITY

TARGET ORGANS: Insufficient data available.

SENSITIZATION: May cause skin sensitization.

CARCINOGENICITY

IARC: A component of this product is classified Group 3 (Not classifiable).

NTP: Not listed as a carcinogen.

OSHA: Not listed as a carcinogen.

OTHER: Not applicable.

OTHER: No data available.

REPRODUCTIVE EFFECTS: Insufficient data available.

MUTAGENICITY: Insufficient data available.

SYNERGISTIC MATERIALS: None known.

POTENTIAL HEALTH EFFECTS

EYES: Causes serious eye damage.

SKIN: Prolonged or repeated contact may cause dermatitis.

SKIN ABSORPTION: No data available.

INGESTION: May be harmful if swallowed. In the case of vomiting, product may be aspirated into lungs causing chemical pneumonia, which in extreme cases could lead to death. See section 4, First Aid Measures, for more information.

ASPIRATION HAZARD: Yes.

INHALATION: Insufficient data available.

MEDICAL CONDITIONS AGGRAVATED: None known.

---

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Some components of this product have moderate aquatic toxicity.

PERSISTENCE AND DEGRADABILITY: Insufficient data available.

BIOACCUMULATIVE POTENTIAL: No data available.

MOBILITY IN SOIL: No data available.

OTHER ADVERSE EFFECTS: No data available.

---

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incinerate or dispose of in accordance with federal, state and local regulations.

EMPTY CONTAINER: Not applicable.

RCRA/EPA WASTE INFORMATION: Contains no material listed by RCRA as a hazardous waste.

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14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated if shipped by ground.

OTHER SHIPPING INFORMATION: Not applicable.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Not regulated if shipped by ground.

OTHER SHIPPING INFORMATION: Not applicable.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Combustible Liquid, NOS

PRIMARY HAZARD CLASS/DIVISION: Combustible Liquid

UN/NA NUMBER: UN1993

PACKING GROUP: III

LABEL: Consult applicable regulations governing air shipments.

PLACARDS: Consult applicable regulations governing air shipments.

IATA NOTE: Consult IATA for quantity limitations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: Yes. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes. **CHRONIC:** No.

313 REPORTABLE INGREDIENTS: None.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable.

REPORTABLE SPILL QUANTITY: Not applicable.

RCRA STATUS: See section 13.

MEXICO

Not regulated for ground transport.

STATE REGULATIONS

MASSACHUSETTS

Contains no substances regulated by the Massachusetts Substance List.

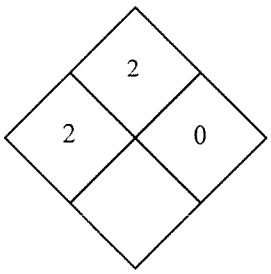
CALIFORNIA

PROPOSITION 65 STATEMENT: This product contains no ingredients known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH:	2
FLAMMABILITY:	2
REACTIVITY:	0
PERSONAL PROTECTION:	B

NFPA RATINGS



SDS Revision Date: November 13, 2015

Safety Data Sheet

Issue Date: 20-Nov-2015 **Revision Date:** 27-Nov-2015 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name TANAWAY

Other means of identification
SDS # E-040

Product Code KLTANAWA

Recommended use of the chemical and restrictions on use
Recommended Use Liquid laundry product.

Details of the supplier of the safety data sheet
Supplier Address
Kleerwite Chemical
P.O. Box 32063
Henrico, VA. 23294

Emergency Telephone Number
Company Phone Number Phone: 877-553-3794

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

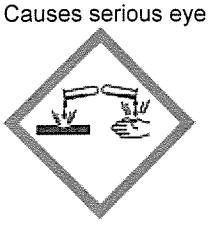
Appearance According to product specification **Physical State** Liquid **Odor** Characteristic

Classification

Serious eye damage/eye irritation	Category 1

Signal Word
Danger

Hazard Statements
Causes serious eye damage



Precautionary Statements - Prevention
Wear eye protection/ face protection

Precautionary Statements - Respons
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Nonylphenol Ethoxylate	127087-87-0	1-10
Sodium metabisulfite	7681-57-4	<5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice If exposed or concerned: Get medical advice/attention.

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects

Symptoms Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
Not determined.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium metabisulfite 7681-57-4	TWA: 5 mg/m^3	(vacated) TWA: 5 mg/m^3	TWA: 5 mg/m^3

Appropriate engineering controls

Engineering Controls Showers. Eyewash stations. Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection Refer to 29 CFR 1910.134 for respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid		
Appearance	According to product specification	**Odor**	Characteristic
Color	Not determined	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	

Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye damage.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Nonylphenol Ethoxylate 127087-87-0	= 1310 mg/kg (Rat)	-	-
Sodium metabisulfite 7681-57-4	= 1310 mg/kg (Rat)	> 2 g/kg (Rat)	-
Lactic Acid 79-33-4	= 3730 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Lactic Acid 50-21-5	= 3543 mg/kg (Rat)	> 2 g/kg (Rabbit)	-
Polyethylene glycol 25322-68-3	= 28 g/kg (Rat)	> 20 mL/kg (Rabbit) > 20 g/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Not classifiable as a human carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium metabisulfite 7681-57-4		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium metabisulfite 7681-57-4	48: 72 h Desmodesmus subspicatus mg/L EC50 40: 96 h Desmodesmus subspicatus mg/L EC50	32: 96 h Lepomis macrochirus mg/L LC50 static	EC50 = 56 mg/L 17 h	89: 24 h Daphnia magna Straus mg/L EC50
Lactic Acid 79-33-4	3.5: 70 h Pseudokirchneriella subcapitata mg/L EC50	320: 96 h Brachydanio rerio mg/L LC50 semi-static 100 - 180: 96 h Lepomis macrochirus mg/L LC50 static 100 - 180: 96 h Oncorhynchus mykiss mg/L LC50 static		240: 48 h Daphnia magna mg/L EC50 180 - 320: 48 h Daphnia magna mg/L EC50 Static
Polyethylene glycol 25322-68-3		5000: 24 h Carassius auratus mg/L LC50		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Sodium metabisulfite 7681-57-4	-3.7
Lactic Acid 79-33-4	-0.62

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Nonylphenol Ethoxylate	Present	X				Present	X	Present	X	X
Sodium metabisulfite	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

AICS *- Australian Inventory of Chemical Substances*

US Federal Regulations

SARA 313
Not determined

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium metabisulfite 7681-57-4	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	Not determined	Not determined	Not determined	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	Not determined	Not determined	Not determined	Not determined

Issue Date: 20-Nov-2015
Revision Date: 27-Nov-2015
Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET – **EasyGo®**

1. Identification

1.1 Product Identifier: EasyGo

1.2 Recommended Use of the Chemical and Restrictions on Use: Removes stains from textiles. For industrial/institutional use only. Do not use at home. Keep out of reach of children.

1.3 Details of the Supplier of the Safety Data Sheet:
A. L. Wilson Chemical Co., PO Box 207, Kearny, NJ 07032, USA
Telephone: 201-997-3300
E-mail: SDS@ALWilson.com

1.4 Emergency Telephone Number:
Chemtrec: 800-424-9300 or 703-527-3887

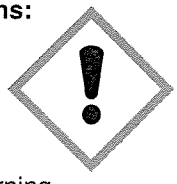
2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Eye Damage/Irritation – Category 2A
Skin Sensitizer – Category 1

2.2 Label Elements:

Contains: Soybean Oil Methyl Esters [67784-80-9], Proprietary Surfactants, DPNB [29911-28-2], Petroleum Distillates [64742-47-8], Orange Terpenes [68647-72-3].

Hazard Pictograms:



Signal Word: Warning

Hazard Statements:
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Precautionary Statements:

Prevention:
P102: Keep out of reach of children.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P308+P313: If exposed or concerned: Get medical advice/attention.
P301+P330+P331+P321: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
P303+P361+P353+P363: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
P234: Keep only in original container.

Disposal Considerations:
P501: Dispose of contents/container to waste collection point and in accordance to applicable regulations.

2.3 Other Hazards:
Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. See section 8 for exposure limits.

3. Composition/Information on Ingredients

Name	CAS No.	Concentration
Soybean Oil Methyl Esters (Methyl Soyates)	67784-80-9	30% ≤ C ≤ 40%
Proprietary Surfactants	Not Available	20% ≤ C ≤ 30%
DPNB; Dipropylene glycol n-butylether	29911-28-2	10% ≤ C ≤ 20%
Petroleum Distillates; Distillate (Petroleum) Hydrotreated Light	64742-47-8	5% ≤ C ≤ 10%
Orange Terpenes	68647-72-3	0.5%≤C≤ 1%

4. First Aid Measures

4.1 Description of Necessary First Aid Measures:

General Information: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, both Acute and Delayed:

Eye Contact: Causes serious eye irritation.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: See section 4.1.

5. Fire-fighting Measures

5.1 Suitable Extinguishing Media: Use water, fog, foam, or Carbon Dioxide "CO_2" for fires in area.

5.2 Specific Hazards Arising from the Substance or Mixture: Not Determined.

5.3 Special Protective Action for Fire-fighters: Use appropriate Personal Protective Equipment when fighting chemical fires. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Additional Information: Use water spray to cool nearby containers exposed to fire.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Cordon off spill area. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

6.2 Environmental Precautions: Avoid release to the environment. Dispose of contents/container to waste collection point and in accordance to applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up: Use a universal absorbent material to collect waste and dispose to collection point and in accordance to applicable regulations.

7. Handling and Storage

7.1 Precautions for Safe Handling: Keep out of reach of children. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

7.2 Conditions for Safe Storage, Including any Incompatibles:

Storage Class: General

Store only in original container. Keep container sealed when not in use.

Packaging Material: Plastic.

Unsuitable Packaging Material: Not determined.

8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Exposure Limits Values

Name	Air Concentration USA ACGIH TLV (ppm)	Air Concentration USA OSHA TWA (mg/m^3)
DPNB	-	10
Orange Terpenes	30	-
Distillate (Petroleum) Hydrotreated Light; Petroleum Distillates	152*	1200*
*Data obtained and provided by supplier		

8.2 Exposure Controls:

Engineering Measures: Work in a well ventilated area or under a ventilation hood.

8.3 Individual Protection Measures, such as Personal Protective Equipment:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Eye Protection: Wear closed safety glasses or chemical splash goggles.

Skin Protection: Wear protective clothing.

Respiratory Protection: None needed when used with adequate ventilation.

Hand Protection: Wear protective gloves. Gloves must be inspected prior to use. Replace if worn or damaged. Do not reuse.

Hygiene Measures: Wash thoroughly after handling. Do not smoke, eat or drink in work area.

9. Physical and Chemical Properties

Appearance: Clear to Light Yellow Liquid.

Odor: Vegetable Oil & Citrus.

Odor Threshold: Not Determined.

pH: 6.5 - 7.0

Melting Point/Freezing Point (°C): Not Applicable.

Initial Boiling Point/Boiling Point Range (°C): ~100°C.

Flash Point (°C): >201°F.

Evaporation Rate: Not Determined.

Flammability (solid, gas): Not Applicable.

Upper/Lower Flammability or Explosive Limits: Not Applicable.

Vapor Pressure: Not Determined.

Vapor Density: Not Determined.

Relative Density (Water = 1): 0.94 at 20°C.

Solubility: Low Solubility in Water.

Partition Coefficient: n-Octanol/Water: Not Determined.

Auto-ignition Temperature: Not Determined.

Viscosity: Not Determined.

Explosive Properties: Not Applicable.

Oxidizing Properties: Not Applicable.

10. Stability and Reactivity

10.1 Reactivity: See sub sections below.

10.2 Chemical Stability: Stable if used according to specifications.

10.3 Possibility of Hazardous Reactions: Strong oxidizing and reducing agents.

10.4 Conditions to Avoid: Avoid high temperatures, open flames, ignition sources.

10.5 Incompatible Materials: Strong oxidizing and reducing agents.

10.6 Hazardous Decomposition Products: In case of fire: Carbon Dioxide, Carbon Monoxide, and may yield Sulfur Dioxide and Oxides of Sulfur.

11. Toxicological Information

Acute Toxicity: Data not available for mixture.

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Eye Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: No information available.

Carcinogenicity: Not listed by NTP, IARC, OSHA, or ACGIH as a carcinogen.

Reproductive Toxicity: No information available.

Specific Target Organ Toxicity – Single Exposure: No information available.

Specific Target Organ Toxicity – Repeated Exposure: No information available.

Aspiration Hazard: No information available.

Inhalation: No information available.

Subchronic/Chronic Toxicity: No information available.

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity: Not determined.

12.2 Persistence and Degradability: Readily biodegradable.

12.3 Bioaccumulative Potential: Not expected to bio-accumulate.

12.4 Mobility in Soil: No information available.

12.5 Results of PBT and vPvB Assessment: This product does not contain PBT or vPvB substances.

12.6 Other Adverse Effects: No data available.

13. Disposal Considerations

13.1 Disposal Methods:

Product (Any Residual Waste/Unused Product): Dispose of any residual product waste or unused product to waste collection point and in accordance to applicable regulations. Avoid release to the environment.

Packaging (White Plastic): After use, close empty bottle, and dispose of to waste collection point and in accordance to applicable regulations.

14. Transport Information

14.1 UN-Number: Not Regulated.

14.2 UN Proper Shipping Name: Not Regulated.

14.3 Transport hazard class(es): Not Regulated.

14.4 Packing group: Not Regulated.

14.5 Environmental Hazard(s): Not Regulated.

14.6 Special Precaution to User: See section 7.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

15.1 Safety Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Regulations:
Inventory Status: All components are on TSCA.
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
SARA (311/312) Hazard Categories:
SARA 313: This product does not contain any SARA 313 Toxic Release Chemicals.

16. Further Information

Abbreviations and Acronyms:
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Concentration (weight percent).
DOT = Department of Transportation (United States).
IMDG = International Maritime Dangerous Goods Code.
IARC = International Agency for Research on Cancer.
OSHA = Occupational Safety & Health Administration.
PBT = Persistent, Bioaccumulative and Toxic Substances.
ppm = parts per million.
OELV = Occupational Exposure Limits Values.
TLV = Threshold Limit Values.
TSCA = Toxic Substance Control Act.
TWA = Time-Weighted Average.
vPvB = very Persistent and very Bioaccumulative Substances.

The information contained herein is accurate to the best of our knowledge. A. L. Wilson Chemical Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

Material Safety Data Sheet
TANECAL PLUS

1. Identification of the Substance/Preparation and the Company/Undertaking

Substance or preparation trade name:	TANECAL PLUS
Unique reference number(s):	068001
Company/undertaking name & address:	Caled Industries, 26 Hanes Drive, Wayne, NJ 07470
Telephone:	1-800-652-2533
Emergency telephone number:	1-800-424-9300 Chemtrec

2. Hazardous Ingredients

Substance:	Aprox. %	CAS #

None as defined by 29 CFR 1910.1200 or state laws

3. Hazards Identification

Health: 1 **Flammability:** 0 **Reactivity:** 0

4. First aid measures

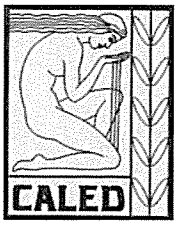
Skin contact:	Flush area with water. When irritation persists get medical attention.
Eyes contact:	Wash eyes with large amount of water. Get medical attention.
Ingestion:	Not a normal route of entry. Drink large quantities of water. Do not induce vomiting. Get medical attention.
Inhalation:	Remove to fresh air. Get medical attention.

5. Fire fighting measures

Suitable extinguishing media:	Water, dry chemicals
Unsuitable extinguishing media:	
Special hazards in fire:	None known
Required special protective equipment.	
for fire-fighters:	Wear Protective clothing and self contained breathing apparatus in confined areas.

6. Accidental release measures

Personal precautions:	Wear safety glosses and gloves
Environmental precautions:	None known
Methods for cleaning:	Neutralized and flush area with water if locally permitted. Dispose of in accordance with federal, state and local regulations.



Material Safety Data Sheet

TANECAL PLUS

7. Handling and storage

Handling: Keep container closed. Avoid contact with skin. Do not freeze.

Storage: Keep container closed away from open flame, heat and sparks.

8. Exposure Controls

Engineering measures: None known
Control Parameters:
Personal protection equipment:
Eye protection: Safety glasses or safety shield. Eye wash station.
Hand protection: Neoprene gloves
Hygiene measures:

9. Physical and chemical properties

Appearance: Hazy liquid
Odor: Odorless
pH: 2.5 – 3.0
Boiling point: 212 F
Melting point: NA
Flashpoint: None
Explosive properties:
Vapor pressure: ND
Relative density: 1.010
Solubility: Soluble in water

10. Stability and reactivity

Conditions to avoid: None known
Materials to avoid: None known
Hazardous decomposition products:
None known

11. Toxicological information

Acute toxicity:
Local effects
Excessive exposure may affect human health as follows:
Skin contact: May cause slight irritation to skin.
Eye contact: Direct contact may cause irritation.
Inhalation: Not expected to be harmful under normal use.
Ingestion: Not normal route of entry. Ingestion of large amount can cause upset stomach And irritation to linings.

12. Ecological information

None known

13. Disposal Considerations

Small spills could be flush with water if locally permitted. Large spills should be neutralized with soda ash or other alkali before vacuuming into drum. Flush to sewer if permitted or disposal in accordance with federal, state and local regulations.

14. Transport information

Classification data:

DOT: Not regulated
UN: Not regulated

15. Regulatory information

Toxics Release Inventory SARA TITLE III, Section 313:

16. Other Information

Recommendations/restrictions:
Sources of key data used to compile:

NA= Not applicable ND= No data available NE= No establish <=Less than >= Greater than

We believe that the statements, Technical information and recommendation contained herein are reliable, but Without warrantee or guarantee of any kind, express or implied and we assume no responsibility for any loss, Damage, or expense, direct or consequential arising from their use.

This MSDS should be properly routed to all individuals who use or may come contact with this product, Understand and follow all pertinent employee and Community Right To Known Regulation.

Preparation date: 01-04-07

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Odorex

OTHER MEANS OF IDENTIFICATION: Not applicable.

GENERAL USE: For professional drycleaning and laundry use only.

PRODUCT DESCRIPTION: Stain Removal Agent

MANUFACTURER

R. R. Street & Co. Inc.
215 Shuman Boulevard/Suite 403
Naperville, IL 60563

Product Information: 800-323-7206 (USA & Canada only) **or** 630-416-4244

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada only) **or** 651-632-9272

Transportation Emergency: 800-424-9300 (USA & Canada only) **or** 703-527-3887

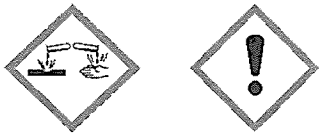
2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Eye Damage/Irritation: Category 1
Skin Corrosion/Irritation: Category 2
Specific Target Organ Toxicity (STOT-SE) Respiratory Irritant Effects: Category 3
Specific Target Organ Toxicity (STOT-SE) Central Nervous System: Category 3

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H315 – Causes skin irritation.
H318 – Causes serious eye damage.
H335 – May cause respiratory irritation.
H336 – May cause drowsiness or dizziness.

Precautionary Statements:

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 – Wash thoroughly after handling.
P271 – Use only outdoors or in well-ventilated areas.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.
P304+P340 – IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P305+P310 –IF IN EYES: Immediately call a POISON CENTER or doctor/physician.

P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313 – If skin irritation occurs: Get medical advice/ attention.
P362+P364 – Take off contaminated clothing and wash before reuse.
P403+P233 – Store in a well-ventilated place. Keep container tightly closed.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulations.

Other Hazards: Not available.
Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identities of one or more components of this product are withheld as a trade secret.

Chemical Name	Wt.%	CAS#
(Trade Secret #1)		-
(Trade Secret #2)	-	-
(Trade Secret #3)	-	-
(Trade Secret #4)	-	-
(Trade Secret #5)	-	-
(Trade Secret #6)	-	-

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water. Consult a physician if irritation persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Irritation, redness, swelling, burning sensation, blurred vision.

SKIN: Irritation, redness, swelling, drying, cracking, blisters.

SKIN ABSORPTION: Insufficient data available.

INGESTION: Nausea. Central nervous system depression, drowsiness, dizziness, and abdominal pain.

INHALATION: May be irritating to respiratory tract. Abdominal pain, headache, dizziness.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not applicable.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide, oxides of sulfur, oxides of nitrogen.

FIRE FIGHTING EQUIPMENT: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Not applicable.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Not applicable.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers.

ELECTROSTATIC ACCUMULATION HAZARD: Not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		ppm	mg/m³	ppm	mg/m³	ppm	mg/m³
(Trade Secret #1)	**TWA**	NE[1]		NE			
	STEL	NE		NE			
(Trade Secret #2)	**TWA**	100[2]		100[2]			
	STEL	NE		150			
(Trade Secret #3)	**TWA**	NE		C 25			
	STEL	NE		NE			
(Trade Secret #4)	**TWA**	400		200[3]			
	STEL	NE		400			
(Trade Secret #5)	**TWA**	NE		NE			
	STEL	NE		NE			
(Trade Secret #6)	**TWA**	NE		NE			
	STEL	NE		NE			

TABLE FOOTNOTES:

1. NE=Not established.

2. Skin notation.

3. A4: Not classifiable as a human carcinogen.

The specific identities of one or more components of this product are withheld as a trade secret.

ENGINEERING CONTROLS: Not applicable.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Neoprene or Barrier™ gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations

are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Not applicable.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light yellow.

PHYSICAL STATE: Liquid.

COLOR: Light yellow.

ODOR: Floral.

ODOR THRESHOLD: No data available.

pH: 6-7

FREEZING POINT: <0°C (32°F)

INITIAL BOILING POINT: ~99°C (211°F)

FLASHPOINT: Not applicable.

EVAPORATION RATE: ~0.3 (butyl acetate = 1)

FLAMMABILITY (Solid, Gas): Not applicable, this product is a liquid at room temperature.

FLAMMABLE LIMITS: No data available.

VAPOR PRESSURE: ~17 mm Hg at 20°C

VAPOR DENSITY: ~0.3 (air=1)

RELATIVE DENSITY: 1.02

SOLUBILITY IN WATER: Dispersible.

PARTITION COEFFICIENT (Log K_{ow}): No data available.

AUTOIGNITION TEMPERATURE: No data available.

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: No data available.

PERCENT VOLATILE: ~75

10. STABILITY AND REACTIVITY

REACTIVITY: No.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Strong oxidizers, strong alkalies.

HAZARDOUS DECOMPOSITION PRODUCTS: Not applicable.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation and skin.

ACUTE TOXICITY (ATE):

DERMAL LD_{50}: Insufficient data available.

ORAL LD_{50}: > 2,000mg/kg (rat)

INHALATION LC_{50}: Insufficient data available.

CHRONIC

TARGET ORGANS: Components of this product caused liver and/or kidney effects in lab animals.

SENSITIZATION: Insufficient data available.

CARCINOGENICITY

IARC: A minor component is classified as Group 3 (Not classifiable).

NTP: Not listed as a carcinogen.

OSHA: Not listed as a carcinogen.

OTHER: ACGIH: A minor component is classified as A4.

OTHER: No data available

REPRODUCTIVE EFFECTS: A component of this product caused fetotoxicity in animals at doses that are maternally toxic.

MUTAGENICITY: Insufficient data available.

SYNERGISTIC MATERIALS: No data available.

POTENTIAL HEALTH EFFECTS

EYES: May cause severe eye irritation.

SKIN: Prolonged or repeated contact may cause dermatitis and irritation.

SKIN ABSORPTION: Insufficient data available.

INGESTION: May be harmful if swallowed.

ASPIRATION HAZARD: Insufficient data available.

INHALATION: High concentrations may cause central nervous system depression, unconsciousness.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing eye, skin, and respiratory disorders.

GENERAL COMMENTS: Refer to Section 3 for additional information on potential health effects.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Components of this product have moderate aquatic toxicity.

PERSISTENCE AND DEGRADABILITY: All components are readily biodegradable.

BIOACCUMULATIVE POTENTIAL: Insufficient data available.

MOBILITY IN SOIL: Insufficient data available.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

EMPTY CONTAINER: Not applicable.

RCRA/EPA WASTE INFORMATION: Contains no material listed by RCRA as a hazardous waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not regulated.

OTHER SHIPPING INFORMATION: Not applicable.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Not regulated.

OTHER SHIPPING INFORMATION: Not a

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: No. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes. **CHRONIC:** No.

313 REPORTABLE INGREDIENTS: None.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable.

REPORTABLE SPILL QUANTITY: Not applicable.

RCRA STATUS: See section 13.

MEXICO

Not applicable.

STATE REGULATIONS

MASSACHUSETTS

Contains one or more substances regulated by the Massachusetts Substance List.

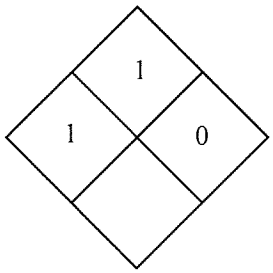
CALIFORNIA

PROPOSITION 65 STATEMENT: This product contains no ingredients known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH:	1
FLAMMABILITY:	1
REACTIVITY:	0
PERSONAL PROTECTION:	B

NFPA RATINGS



SDS Revision Date: May 13, 2015

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Picrin

OTHER MEANS OF IDENTIFICATION: Not applicable.

GENERAL USE: For professional drycleaning use only.

PRODUCT DESCRIPTION: Stain Removal Agent

MANUFACTURER

R. R. Street & Co. Inc.
215 Shuman Boulevard/Suite 403
Naperville, IL 60563

Product Information: 800-323-7206 (USA & Canada only) **or** 630-416-4244

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada only) **or** 651-632-9272

Transportation Emergency: 800-424-9300 (USA & Canada only) **or** 703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Skin Corrosion/Irritation: Category 2
Eye Damage/Irritation: Category 2
Specific Target Organ Toxicity (STOT-SE): Narcotic Effects: Category 3
Germ Cell Mutagenicity: Category 2
Carcinogenicity: Category 1A
Aspiration Hazard: Category 1

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H336 – May cause drowsiness or dizziness.
H341 – Suspected of causing genetic defects.
H350 – May cause cancer.

Precautionary Statements:

P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P261 – Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 – Wash skin thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/eye protection/ face protection.
P281 – Use personal protective equipment as required.
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.

P362+P364 – Take off contaminated clothing and wash before reuse.
P332+P313 – If skin irritation occurs: Get medical advice/ attention.
P304+P340 – IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 – Call a POISON CENTER/doctor/physician if you feel unwell.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical advice/ attention.
P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 – Do NOT induce vomiting
P321 – Specific treatment, see First Aid Measures section (section 4).
P308+P313 – IF exposed or concerned: Get medical advice/ attention.
P403+P233 – Store in a well-ventilated place. Keep container tightly closed.
P501 – Dispose of contents and container to licensed, permitted incinerator, or other thermal destruction device.

Other Hazards: Not available.
Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Trichloroethylene	>75	79-01-6

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water. Consult a physician if irritation persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

NOTES TO PHYSICIAN: Only administer adrenaline after careful consideration following overexposure. Increased sensitivity of the heart to adrenaline may be caused by overexposure to this product. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Discomfort, pain, irritation.

SKIN: Irritation, dermatitis.

SKIN ABSORPTION: Insufficient data available.

INGESTION: May result in irritation to mouth and GI tract, Vomiting and subsequent aspiration into lungs could possibly lead to pneumonia or pulmonary edema.

INHALATION: Central nervous system depressant. Inhalation can cause irritation of the respiratory tract, dizziness, nausea, headache, loss of coordination and equilibrium.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not applicable.

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Emits toxic fumes under fire conditions. Hydrogen chloride, phosgene.

OTHER CONSIDERATIONS: Concentrated vapor can be ignited by high-intensity ignition source. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Contain spill. Provide plenty of fresh air. Avoid breathing vapor. Clean up spills immediately with absorbent material, observing precautions in the Exposure Controls/Personal Protection section (see section 8). Place absorbed material in closed containers for disposal (see section 13). Do not flush to sewer. Avoid contamination of ground and surface waters.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Not applicable.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers in a cool, dry, well-ventilated area.

ELECTROSTATIC ACCUMULATION HAZARD: Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3
Trichloroethylene	**TWA**	100	10[1]				
	STEL	200[2]	25				

TABLE FOOTNOTES

1. A2: Suspected human carcinogen.

2. Ceiling concentration. A 300 ppm peak concentration is allowed for 5 minutes in any 2-hour period.

ENGINEERING CONTROLS: Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Neoprene or Barrier™ gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations

are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Where contact is likely, wear the appropriate chemical resistant equipment, which depending on circumstances may include gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area.

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear.

PHYSICAL STATE: Liquid.

COLOR: Colorless.

ODOR: Ethereal.

ODOR THRESHOLD: 20 ppm

pH: Not applicable.

FREEZING POINT: -85°C (-121°F)

INITIAL BOILING POINT: 87°C (188°F)

FLASHPOINT: No data available.

EVAPORATION RATE: 4.5 (butyl acetate = 1)

FLAMMABILITY (Solid, Gas): Not applicable, this product is a liquid at room temperature.

FLAMMABLE LIMITS: 8.0 to 12.5%

VAPOR PRESSURE: 58 mm Hg at 20°C

VAPOR DENSITY: 4.5 (air = 1)

RELATIVE DENSITY: 1.45

SOLUBILITY IN WATER: Negligible.

PARTITION COEFFICIENT (Log K_{ow}): 2.42

AUTOIGNITION TEMPERATURE: 420°C (788°F)

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: No data available.

PERCENT VOLATILE: 100

10. STABILITY AND REACTIVITY

REACTIVITY: No.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.

CONDITIONS TO AVOID: Contact with open flame, electric arcs, other hot surfaces which can cause thermal decomposition.

INCOMPATIBLE MATERIALS: Strong alkalies, strong acids, oxidizers, sodium, potassium, lithium, aluminum, barium, magnesium, titanium.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, phosgene.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation and skin.

ACUTE TOXICITY (ATE):

DERMAL LD_{50}: > 20,000 mg/kg (rabbit)

ORAL LD_{50}: > 2,000mg/kg (rat)

INHALATION LD_{50}: > 20 mg/L (mouse)

CHRONIC TOXICITY

TARGET ORGANS: Overexposure can lead to kidney and liver damage.

SENSITIZATION: Insufficient data available.

CARCINOGENICITY

IARC: This product is classified as Group 1 (Carcinogenic to humans).

NTP: This product is reasonably anticipated to be a human carcinogen.

OSHA: Not listed as a carcinogen.

OTHER: ACGIH: A2 – Limited epidemiology data have shown a weak association between trichloroethylene exposure and renal cancer.

OTHER: No data available.

REPRODUCTIVE EFFECTS: Insufficient data available.

MUTAGENICITY: Laboratory experiments have shown mutagenic effects. In vitro tests showed mutagenic effects.

SYNERGISTIC MATERIALS: No data available.

POTENTIAL HEALTH EFFECTS

EYES: May cause serious irritation.

SKIN: Prolonged or repeated exposure may cause dermatitis.

SKIN ABSORPTION: Harmful if absorbed through the skin.

INGESTION: May be harmful if swallowed. In the case of vomiting, product may be aspirated into lungs causing chemical pneumonia, which in extreme cases could lead to death. See section 4, First Aid Measures, for more information.

ASPIRATION HAZARD: Yes.

INHALATION: Inhalation can cause unconsciousness and even death in confined or poorly ventilated areas.

MEDICAL CONDITIONS AGGRAVATED: Insufficient data available.

GENERAL COMMENTS: Refer to Section 3 for additional information on potential health effects.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Harmful to aquatic organisms.

PERSISTENCE AND DEGRADABILITY: Insufficient data available.

BIOACCUMULATIVE POTENTIAL: Does not bioaccumulate.

MOBILITY IN SOIL: Insufficient data available.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult federal, state and local authorities for approved procedures

EMPTY CONTAINER: Not applicable.

RCRA/EPA WASTE INFORMATION: Contains material(s) listed by RCRA as a hazardous waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Trichloroethylene
TECHNICAL NAME: None.
PRIMARY HAZARD CLASS/DIVISION: 6.1
UN/NA NUMBER: UN1710
PACKING GROUP: III
LABEL: Toxic
REPORTABLE QUANTITY (RQ) UNDER CERCLA: 8 gal
OTHER SHIPPING INFORMATION: Original 4x1-gallon packaging is approved for ground shipments only.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Trichloroethylene
PRIMARY HAZARD CLASS/DIVISION: 6.1
UN/NA NUMBER: UN1710
PACKING GROUP: III
LABEL: Toxic
OTHER SHIPPING INFORMATION: Original 4x1-gallon packaging is approved for ground shipments only. Drums of this product contain a Reportable Quantity of trichloroethylene.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Trichloroethylene
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: UN1710
PACKING GROUP: III
LABEL: Toxic
PLACARD: Consult applicable regulations governing air shipments.
IATA NOTE: Original 4x1-gallon packaging is not approved for air shipment. Consult applicable regulations for packaging requirements and quantity limitations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: No. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes. **CHRONIC:** Yes.

313 REPORTABLE INGREDIENTS: Trichloroethylene is reportable.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Trichloroethylene has an RQ of 100 lbs.

REPORTABLE SPILL QUANTITY: 8 gals

RCRA STATUS: See section 13.

MEXICO

Regulated for transportation.

STATE REGULATIONS

MASSACHUSETTS

Contains one or more substances regulated by the Massachusetts Substance List.

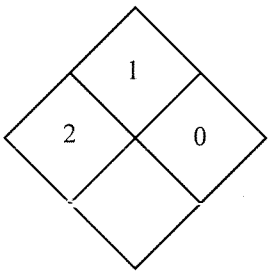
CALIFORNIA

PROPOSITION 65 STATEMENT: Trichloroethylene is on the Proposition 65 list of chemicals known to the State of California to cause cancer.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH:	3
FLAMMABILITY:	1
REACTIVITY:	0
PERSONAL PROTECTION:	H

NFPA RATINGS



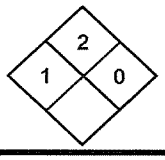
SDS Revision Date: June 3, 2015

MATERIAL SAFETY DATA SHEET

PRODUCT HYDRO SPOT

NFPA HAZARD RATINGS*

Health	1	Slight health hazard
Fire	2	Moderately combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Spot and stain removal agent for drycleaning only.
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Terpene hydrocarbons	40-60	5989-27-5	100 ppm TWA	oral: 5 g/kg (rat) dermal: 5 g/kg (rabbit)

SECTION 3: PHYSICAL DATA

Appearance: Yellow-orange liquid
Odor: Citrus odor
Specific Gravity (20° C): 0.919
pH (20:80 in IPA/H2O Soln.): 7.5 - 8.5
Boiling Point: 257°F
Solubility in Water: Slight - forms emulsion
Vapor Pressure (mm Hg): No data
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): 108° (TCC)
Upper Flammable Limit: 6.1 (terpene hydrocarbons)
Lower Flammable Limit: 0.7 (terpene hydrocarbons)
Extinguishing Media: Dry chemical, carbon dioxide, water fog, or other media for Class B fires.
Special Fire Fighting Procedures: Wear self-contained breathing apparatus. Cool containers with water spray.
Unusual Fire and Explosion Hazards: Vapors may form combustible or explosive mixture with air. Combustible products may be toxic.

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Use or storage at temperatures over 120°F
Incompatibility (materials to avoid): Strong oxidizers
Hazardous Decomposition Products: Burning may produce toxic, irritating vapors.
Hazardous Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Slight

Effects of Overexposure:
Acute: Exposure to high concentrations of vapors may cause headaches, nausea, dizziness, or nose, throat, or eye irritation. Contact with eyes, prolonged or repeated contact with skin may cause drying or irritation.
Chronic: Prolonged or repeated exposure can cause drying, defatting, and dermatitis of skin.

Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
100 ppm TWA (terpene hydrocarbons)	Slight eye and skin	None reported	No components are listed by ACGIH, IARC or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.
When cleaning up large spills in confined areas, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.
Local exhaust at work station recommended.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.
Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in closed containers in a well ventilated area. Keep containers closed when not in use. Keep away from heat and open flame.

SPILL OR LEAK PROCEDURES: Avoid breathing vapors. Keep from sources of ignition. Soak up on absorbent material (sawdust, etc.) and shovel into containers for disposal.

WASTE DISPOSAL METHOD: Dispose of in manner that complies with all local, state, and federal regulations for combustible wastes.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Combustible. Keep away from heat and open flames. Use with adequate ventilation. Avoid prolonged breathing of vapors. Avoid contact with skin and eyes.

FIRST AID:

Remove person overcome by vapors to fresh air. In case of contact with eyes, flush for 15 minutes with water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting. Call physician immediately.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove person overcome by vapors to fresh air.
Eyes: Flush eyes 15 minutes with water.
Skin: Wash off of skin with soap and water.

Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 16, 2010

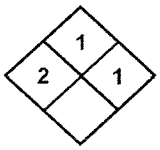
Replaces MSDS of: November 10, 2008

MATERIAL SAFETY DATA SHEET

PRODUCT WETSPOT

NFPA HAZARD RATINGS*

Health	2	Moderate health hazard
Fire	1	Slightly combustible
Stability	1	Slightly instable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Stain removal agent for laundry and drycleaning
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Ammonium hydroxide (aqua ammonia)	5-10	1336-21-6	50 ppm TWA	oral: 350 mg/kg (rat)

SECTION 3: PHYSICAL DATA

Appearance: Clear sky blue liquid
Odor: Ammonia
Specific Gravity (20° C): 1.003
pH (Straight): 11.8-12.8
Boiling Point: 195°F
Solubility in Water: Miscible
Vapor Pressure (mm Hg): No data
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): >230 (PM)
Upper Flammable Limit: 28% Ammonia
Lower Flammable Limit: 15% Ammonia
Extinguishing Media: Compatible with all types of fire extinguishers.
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: None

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Heat, sunlight, incompatibles, sources of ignition
Incompatibility (materials to avoid): Heavy metal,acids, halogens, salts, copper, and aluminum
Hazardous Decomposition Products: Ammonia on heating, carbon dioxide, carbon monoxide
Hazardous Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Slight
Effects of Overexposure:
Acute: Irritating to nose, throat, lungs, and eyes. Skin irritation from contact.
Chronic: None
Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
50 ppm TWA (ammonium hydroxide)	Severe eye, skin, and mucus membrane irritation from contact or fumes	None reported	No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation. When cleaning up large spills in confined area, self-contained breathing apparatus is recommended.

Ventilation: Local exhaust at work station recommended.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.

Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in containers at temperatures below 122°F. Do NOT use or store in aluminum or brass containers. Keep away from heavy metals (silver, lead, zinc) or their salts.

SPILL OR LEAK PROCEDURES: Small spills - flush to sewer with water. Large spills - soak up on absorbent material and transfer to containers for disposal as nonhazardous waste.

WASTE DISPOSAL METHOD: Nonhazardous. Flush small quantities to sewer. Large spills - soak up on absorbent material. Dispose of materials and containers in municipal landfills in compliance with all local, state, and federal regulations.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Avoid contact with eyes and skin. Avoid breathing vapors.

FIRST AID:

Remove person overcome by fumes to fresh air. Flush eyes for 15 minutes with water. Wash off of skin with soap and water. If swallowed, give fruit juice, water, or milk to reduce irritation. Do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove person overcome by fumes to fresh air.

Eyes: Flush eyes for 15 minutes with water.

Skin: Wash off of skin with soap and water.

Ingestion: If swallowed, do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 21, 2010

Replaces MSDS of: November 7, 2008

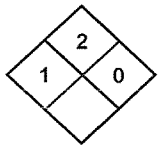
MATERIAL SAFETY DATA SHEET

PRODUCT H/C Too

Adco™

NFPA HAZARD RATINGS*

Health	1	Slight health hazard
Fire	2	Moderately combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Hydrocarbon based semi-wet spotter
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Synthetic isoparaffinic hydrocarbon	<80	68551-17-7	300 ppm TWA (recommended)	oral: 34.6 g/kg (rat)

SECTION 3: PHYSICAL DATA

Appearance: Clear, water-white to light yellow liquid
Odor: Bland
Specific Gravity (20° C): 0.817
pH (20:80 in IPA/H_2O Soln.): 6-6.5
Boiling Point: >350°F
Solubility in Water: Dispersible
Vapor Pressure (mm Hg): No data
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): 138 (TCC)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Dry chemical, carbon dioxide, water fog
Special Fire Fighting Procedures: Avoid directing strong water stream into product - may generate foam
Unusual Fire and Explosion Hazards: High heat may produce noxious decomposition product

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: High heat
Incompatibility (materials to avoid): Strong oxidizers, strong alkalis
Hazardous Decomposition Products: Amines, ammonia, and irritating fumes
Hazardous Polymerization: Will not occur

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Low
Effects of Overexposure:
Acute: Causes drying and irritation in eyes or on prolonged contact with skin.
Chronic: None
Carcinogenicity: None of the ingredients of this mixture have been identified as a carcinogen or probable carcinogen by ACGIH, IARC, or OSHA.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
300 ppm TWA recommended (synthetic isoparaffinic hydrocarbon)	Very slight eye and skin	None reported	No components are listed by ACGIH, IARC, or OSHA
TERATOGENICITY	**REPRODUCTIVE TOXICITY**	**MUTAGENICITY**	**SYNERGISTIC PRODUCTS**
None effects reported	None effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.
When cleaning up large spills in confined areas, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.
Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in plastic or lined metal containers. Use plastic or stainless steel drum pump.

SPILL OR LEAK PROCEDURES: Small spills may be flushed to sewer with water. Larger spills - soak up on absorbent material and transfer to containers for disposal as nonhazardous waste.

WASTE DISPOSAL METHOD: Nonhazardous. Flush to sewer or dispose of material and container in nonhazardous municipal landfill in compliance with all local, state, and federal regulations.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:
Splashing into eyes or prolonged or repeated contact with skin may cause irritation.

FIRST AID:
In case of contact with eyes, flush 15 minutes with water. Wash off of skin. If swallowed, do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: No treatment necessary.
Eyes: Flush eyes 15 minutes with water.
Skin: Wash off of skin with soap and water.
Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 16, 2010

Replaces MSDS of: August 25, 2008

Product Specification & SAFETY DATA SHEET (EC 648/2004)

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Date: 1 Sept 2011

Urine-Off Multi-Pet Odor and Stain Remover Product Code: Multi-Pet

Mfg. by: Bio-Pro Research, LLC, 1140 Tate Blvd. SE, Hickory, NC 28602 USA, Phone (1) 828-449-1237
Emergency Call (1) 828-449-1237 Product Manager

Emergency Action: In the event of a medical emergency, contact your doctor or local hospital emergency department, who may seek advise from our Product Manager where the full substance details are held.

Product Description: Urine-Off is a bio-enzymatic Urine Odor and Stain Remover that removes urine odors and stains from surfaces. It is generally applied by pump spray application.

Directions for use: Soft Surfaces: Blot up excess urine and saturate surface and any sub-surface padding with **Urine-*Off*** and allow to air dry; reapply if necessary. Rinse the treated area with clean water and extract residues.
Hard Surfaces: Blot up urine, saturate surface with **Urine-*Off***, wipe up residue with cloth or paper towel.
ALWAYS TEST AREA TO BE CLEANED FOR COLOR FASTNESS BEFORE PROCEEDING!

2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	EINCS NO.	Risk	% (EC Range)
Water	7732-18-5	None	None	More than 30%
Non-ionic surfactant	68439-46-3	Polymer	Xi - R36/37/38	Less than 5%
Also contains Preservative: Benzisothiazolinone	2634-33-5			Less than 1%
Perfumes: Contains perfumes	None			Less than 1%
Also contains natural enzymes and viable biological cultures	None	None		Less than 1%

3. HAZARDS IDENTIFICATION

Irritant - irritating to eyes.
Contains enzymes. May produce an allergic reaction in rare circumstances.

4. FIRST AID MEASURES

Eyes: Rinse immediately with copious amounts of water, holding eyelids open. Seek medical advice if irritation persists.
Inhalation: Remove from source of exposure.
Skin: Wash thoroughly with soap and water.
Ingestion: Remove product from mouth, drink large quantities of water or milk and seek medical advise if discomfort persists.

5. FIRE FIGHTING MEASURES

NON-FLAMMABLE - In the event of a fire due to other causes, the product is compatible with water, foam, carbon dioxide, and dry chemical extinguishers.

6. ACCIDENTAL RELEASE MEASURES

Absorb with absorbent material and dispose of in commercial waste or hose away with plenty of water into wastewater drain (foul sewer).

7. HANDLING AND STORAGE

Avoid contact with eyes, Do not mix with other chemicals. Store in original container. Avoid heat.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Hand: Personal protection is not normally required unless a risk assessment indicates the need for it.
Eyes: Personal protection is not normally required unless a risk assessment indicates the need for it.
Skin: Personal protection is not normally required unless a risk assessment indicates the need for it.
Respiration: Personal protection is not normally required unless a risk assessment indicates the need for it.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	White cloudy liquid	**Odour:**	Citrus
pH:	6.5 - 8.5	**Boiling Point °C:**	100
Density:	.95 -1.10 gm/cm³	**Flash Point °C:**	None
Flammability:	Not applicable	**Explosive:**	Not Applicable
Oxidation:	Not applicable	**Vapor pressure:**	Not determined

Solubility:	100% in water	**Partition coefficient:**	Not determined
Viscosity:	1-6 cps	**Vapor Density:**	Not determined
Evaporation Rate:	As water		

10. STABILITY AND REACTIVITY

Stability:	Stable	**Hazardous Decomposition:**	None known if stored in approved guidelines.
Conditions to avoid:	Temperature Extremes / Strong Acids and Alkalis		

11. TOXICOLOGICAL INFORMATION

Eyes:	Irritant	**Inhalation:**	Mild irritant
Skin:	Unlikely to be irritant in normal use, but could cause redness in prolonged direct contact by sensitized individuals.	**Ingestion:**	Mild irritant

12. ECOLOGICAL INFORMATION

When used for its intended purpose, this product should not cause adverse effects in the environment.

13. DISPOSAL CONSIDERATIONS

For small quantities, dilute with water and dispose of in a wasterwater drain (foul sewer). Rinse out container and recycle or dispose in commercial waste. For large quantities, collect and reuse or dispose of in accordance with local ordinances.

14. TRANSPORT INFOPRMATION

EEC Regulation:	Not regulated	RID/ADR:	Not regulated
IMDG/UN:	Not regulated	ICAO/IATA:	Not regulated

15. REGULATORY INFORMATION:

Hazard symbol:	Xi	IRRITANT
Risk Phrases:	R36	Irritating to Eyes
	Contains enzymes. May produce an allergic reaction.	
Safety Phrases:	S2	Keep out of reach of children
	S25	Avoid contact with eyes
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.

16. Other information

The information given is intended to be of assistance to users and, while believed to be accurate is not guaranteed. Application and situation variance can affect results. Users are encouraged to conduct their own trials. Suggestions rendered neither give nor imply guarantees for intended use.

Text of phrases associated with ingredients in section 2:

R36 Irritating to eyes

SAFETY DATA SHEET – **EasyGo®**

1. Identification

1.1 Product Identifier: EasyGo

1.2 Recommended Use of the Chemical and Restrictions on Use: Removes stains from textiles. For industrial/institutional use only. Do not use at home. Keep out of reach of children.

1.3 Details of the Supplier of the Safety Data Sheet:
A. L. Wilson Chemical Co., PO Box 207, Kearny, NJ 07032, USA
Telephone: 201-997-3300
E-mail: SDS@ALWilson.com

1.4 Emergency Telephone Number:
Chemtrec: 800-424-9300 or 703-527-3887

2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Eye Damage/Irritation – Category 2A
Skin Sensitizer – Category 1

2.2 Label Elements:

Contains: Soybean Oil Methyl Esters [67784-80-9], Proprietary Surfactants, DPNB [29911-28-2], Petroleum Distillates [64742-47-8], Orange Terpenes [68647-72-3].

Hazard Pictograms:



Signal Word: Warning

Hazard Statements:
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Precautionary Statements:

Prevention:
P102: Keep out of reach of children.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P308+P313: If exposed or concerned: Get medical advice/attention.
P301+P330+P331+P321: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
P303+P361+P353+P363: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
P234: Keep only in original container.

Disposal Considerations:
P501: Dispose of contents/container to waste collection point and in accordance to applicable regulations.

2.3 Other Hazards:
Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. See section 8 for exposure limits.

3. Composition/Information on Ingredients

Name	CAS No.	Concentration
Soybean Oil Methyl Esters (Methyl Soyates)	67784-80-9	30% ≤ C ≤ 40%
Proprietary Surfactants	Not Available	20% ≤ C ≤ 30%
DPNB; Dipropylene glycol n-butylether	29911-28-2	10% ≤ C ≤ 20%
Petroleum Distillates; Distillate (Petroleum) Hydrotreated Light	64742-47-8	5% ≤ C ≤ 10%
Orange Terpenes	68647-72-3	0.5%≤C≤ 1%

4. First Aid Measures

4.1 Description of Necessary First Aid Measures:

General Information: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, both Acute and Delayed:

Eye Contact: Causes serious eye irritation.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: See section 4.1.

5. Fire-fighting Measures

5.1 Suitable Extinguishing Media: Use water, fog, foam, or Carbon Dioxide "CO_2" for fires in area.

5.2 Specific Hazards Arising from the Substance or Mixture: Not Determined.

5.3 Special Protective Action for Fire-fighters: Use appropriate Personal Protective Equipment when fighting chemical fires. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Additional Information: Use water spray to cool nearby containers exposed to fire.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Cordon off spill area. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

6.2 Environmental Precautions: Avoid release to the environment. Dispose of contents/container to waste collection point and in accordance to applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up: Use a universal absorbent material to collect waste and dispose to collection point and in accordance to applicable regulations.

7. Handling and Storage

7.1 Precautions for Safe Handling: Keep out of reach of children. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

7.2 Conditions for Safe Storage, Including any Incompatibles:

Storage Class: General

Store only in original container. Keep container sealed when not in use.

Packaging Material: Plastic.

Unsuitable Packaging Material: Not determined.

8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Exposure Limits Values

Name	Air Concentration USA ACGIH TLV (ppm)	Air Concentration USA OSHA TWA (mg/m^3)
DPNB	-	10
Orange Terpenes	30	
Distillate (Petroleum) Hydrotreated Light; Petroleum Distillates	152*	1200*
*Data obtained and provided by supplier		

8.2 Exposure Controls:

Engineering Measures: Work in a well ventilated area or under a ventilation hood.

8.3 Individual Protection Measures, such as Personal Protective Equipment:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Eye Protection: Wear closed safety glasses or chemical splash goggles.

Skin Protection: Wear protective clothing.

Respiratory Protection: None needed when used with adequate ventilation.

Hand Protection: Wear protective gloves. Gloves must be inspected prior to use. Replace if worn or damaged. Do not reuse.

Hygiene Measures: Wash thoroughly after handling. Do not smoke, eat or drink in work area.

9. Physical and Chemical Properties

Appearance: Clear to Light Yellow Liquid.

Odor: Vegetable Oil & Citrus.

Odor Threshold: Not Determined.

pH: 6.5 - 7.0

Melting Point/Freezing Point (°C): Not Applicable.

Initial Boiling Point/Boiling Point Range (°C): ~100°C.

Flash Point (°C): >201°F.

Evaporation Rate: Not Determined.

Flammability (solid, gas): Not Applicable.

Upper/Lower Flammability or Explosive Limits: Not Applicable.

Vapor Pressure: Not Determined.

Vapor Density: Not Determined.

Relative Density (Water = 1): 0.94 at 20°C.

Solubility: Low Solubility in Water.

Partition Coefficient: n-Octanol/Water: Not Determined.

Auto-ignition Temperature: Not Determined.

Viscosity: Not Determined.

Explosive Properties: Not Applicable.

Oxidizing Properties: Not Applicable.

10. Stability and Reactivity

10.1 Reactivity: See sub sections below.

10.2 Chemical Stability: Stable if used according to specifications.

10.3 Possibility of Hazardous Reactions: Strong oxidizing and reducing agents.

10.4 Conditions to Avoid: Avoid high temperatures, open flames, ignition sources.

10.5 Incompatible Materials: Strong oxidizing and reducing agents.

10.6 Hazardous Decomposition Products: In case of fire: Carbon Dioxide, Carbon Monoxide, and may yield Sulfur Dioxide and Oxides of Sulfur.

11. Toxicological Information

Acute Toxicity: Data not available for mixture.

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Eye Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: No information available.

Carcinogenicity: Not listed by NTP, IARC, OSHA, or ACGIH as a carcinogen.

Reproductive Toxicity: No information available.

Specific Target Organ Toxicity – Single Exposure: No information available.

Specific Target Organ Toxicity – Repeated Exposure: No information available.

Aspiration Hazard: No information available.

Inhalation: No information available.

Subchronic/Chronic Toxicity: No information available.

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity: Not determined.

12.2 Persistence and Degradability: Readily biodegradable.

12.3 Bioaccumulative Potential: Not expected to bio-accumulate.

12.4 Mobility in Soil: No information available.

12.5 Results of PBT and vPvB Assessment: This product does not contain PBT or vPvB substances.

12.6 Other Adverse Effects: No data available.

13. Disposal Considerations

13.1 Disposal Methods:

Product (Any Residual Waste/Unused Product): Dispose of any residual product waste or unused product to waste collection point and in accordance to applicable regulations. Avoid release to the environment.

Packaging (White Plastic): After use, close empty bottle, and dispose of to waste collection point and in accordance to applicable regulations.

14. Transport Information

14.1 UN-Number: Not Regulated.

14.2 UN Proper Shipping Name: Not Regulated.

14.3 Transport hazard class(es): Not Regulated.

14.4 Packing group: Not Regulated.

14.5 Environmental Hazard(s): Not Regulated.

14.6 Special Precaution to User: See section 7

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

15.1 Safety Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Regulations:
Inventory Status: All components are on TSCA.
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
SARA (311/312) Hazard Categories:
SARA 313: This product does not contain any SARA 313 Toxic Release Chemicals.

16. Further Information

Abbreviations and Acronyms:
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Concentration (weight percent).
DOT = Department of Transportation (United States).
IMDG = International Maritime Dangerous Goods Code.
IARC = International Agency for Research on Cancer.
OSHA = Occupational Safety & Health Administration.
PBT = Persistent, Bioaccumulative and Toxic Substances.
ppm = parts per million.
OELV = Occupational Exposure Limits Values.
TLV = Threshold Limit Values.
TSCA = Toxic Substance Control Act.
TWA = Time-Weighted Average.
vPvB = very Persistent and very Bioaccumulative Substances.

The information contained herein is accurate to the best of our knowledge. A. L. Wilson Chemical Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: H/C Too

OTHER MEANS OF IDENTIFICATION: Not applicable.

GENERAL USE: For professional drycleaning use only.

PRODUCT DESCRIPTION: Stain Removal Agent

MANUFACTURER

Adco Professional Products LLC
1706 Ledo Rd.
Albany, GA 31707

Product Information: 800-821-7556 (USA & Canada only)

24 HR. EMERGENCY TELEPHONE NUMBERS

Medical Emergency: 866-303-6947 (USA & Canada only) **or** 651-632-9272

Transportation Emergency: 800-424-9300 (USA & Canada only) **or** 703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Flammable Liquids: Category 3
Aspiration Hazard: Category 1
Skin Corrosion/Irritation: Category 2
Eye Damage/Irritation: Category 2

GHS LABEL ELEMENTS

Symbol(s):



Signal Word: Danger

Hazard Statements:

H226 – Flammable liquid and vapor.
H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation
H319 – Causes serious eye irritation.

Precautionary Statements:

P210 – Keep away from heat/sparks/open flames/hot surfaces - No smoking.
P240 – Ground/bond container and receiving equipment.
P241 – Use explosion-proof electrical/ventilating/lighting equipment.
P242 – Use non-sparking tools.
P243 –Take precautionary measures against static discharge.
P264 – Wash thoroughly after handling.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310+P331 – If SWALLOWED: Immediately call a POISON CENTER or doctor/physician. DO NOT induce vomiting.
P303+P361+P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 – If skin irritation occurs: Get medical advice/attention.
P337+P313 – If eye irritation persists: Get medical advice/attention
P362+P364 – Take off all contaminated clothing and wash before reuse.
P370+P378 – In case of fire: Use water fog or fine spray, foam, carbon dioxide extinguishers, or dry chemical extinguishers for extinction.
P403+P233+P235 – Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P501 – Dispose of contents and container to licensed, permitted incinerator, or other thermal destruction device.

Other Hazards: Not available.
Unknown Acute Toxicity: Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The specific identities of one or more components of this product are withheld as a trade secret.

Chemical Name	Wt.%	CAS
Synthetic isoparaffinic hydrocarbons	<80	68551-17-7
Trade Secret #2	-	-
Trade Secret #3	-	-
Trade Secret #4	-	-
Trade Secret #5	-	-

COMMENTS: None.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with water. Consult a physician if irritation persists.

INGESTION: Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: May cause burning sensation, pain, watering, redness, swelling, and blurred vision.

SKIN: May cause burning sensation, pain, redness, drying, blisters and cracking.

SKIN ABSORPTION: Insufficient data available.

INGESTION: May cause diarrhea, nausea, and irritation to gastrointestinal tract.

INHALATION: May cause coughing, sore throat, and irritation to the respiratory tract.

ADDITIONAL INFORMATION: After emergency actions, call the emergency medical information number on page 1 or a physician immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NFPA Class II

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, foam, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spill with absorbent material and water, if necessary.

LARGE SPILL: Contain spill. Avoid breathing vapor. Clean up spills immediately with absorbent material, observing precautions in the Exposure Controls/Personal Protection section (see section 8). Place absorbed material in closed containers disposal (see section 13).

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks, and flame.

HANDLING: Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in labeled, tightly sealed containers in a cool, well-ventilated area.

ELECTROSTATIC ACCUMULATION HAZARD: Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
		ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3
Synthetic isoparaffinic hydrocarbons	**TWA**	300		NE			
	STEL	NE[1]		NE			
Trade Secret #1	**TWA**	NE		NE			
	STEL	NE		NE			
Trade Secret #2	**TWA**	NE		NE			
	STEL	NE		NE			
Trade Secret #3	**TWA**	NE		C 25			
	STEL	NE		NE			
Trade Secret #4	**TWA**	NE		NE			
	STEL	NE		NE			

TABLE FOOTNOTES

1. NE = Not Established.

The specific identities of one or more components of this product are withheld as a trade secret.

ENGINEERING CONTROLS: Not applicable.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, or goggles.

SKIN: Nitrile or Barrier™ gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

PROTECTIVE CLOTHING: Where contact is likely, wear the appropriate chemical resistant equipment, which depending on circumstances may include gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Do not eat or drink in work area

OTHER USE PRECAUTIONS: Have eye wash station available. Do not wear contact lenses without eye protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear.

PHYSICAL STATE: Liquid.

COLOR: Light yellow.

ODOR: Bland

ODOR THRESHOLD: No data available.

pH: 6-6.5

FREEZING POINT: No data available.

INITIAL BOILING POINT: >177°C (350°F)

FLASHPOINT: 59°C (138°F) (TCC)

EVAPORATION RATE: No data available.

FLAMMABILITY (Solid, Gas): Not applicable this product is a liquid at room temperature.

FLAMMABLE LIMITS: No data available.

VAPOR PRESSURE: No data available.

VAPOR DENSITY: No data available.

RELATIVE DENSITY: 0.817

SOLUBILITY IN WATER: Dispersible.

PARTITION COEFFICIENT (Log K_{ow}): No data available.

AUTOIGNITION TEMPERATURE: No data available.

DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: No data available.

PERCENT VOLATILE: ~88

10. STABILITY AND REACTIVITY

REACTIVITY: No.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Polymerization will not occur.

CONDITIONS TO AVOID: High heat.

INCOMPATIBLE MATERIALS: Strong oxidizers, strong alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Amines, ammonia, and irritating fumes.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation and skin.

ACUTE TOXICITY (ATE):

DERMAL LD_{50}: Insufficient data available.

ORAL LD_{50}: > 2,000 mg/kg (rat)

INHALATION LC_{50}: Insufficient data available.

CHRONIC TOXICITY

TARGET ORGANS: A minor component of this product caused increased liver size in animals, which is believed to be adaptive effect. This component also caused kidney effects in male rats, which is not believed to be relevant to humans.

SENSITIZATION: Insufficient data available.

CARCINOGENICITY

IARC: Not listed as a carcinogen.

NTP: Not listed as a carcinogen.

OSHA: Not listed as a carcinogen.

OTHER: No data available.

OTHER: No data available.

REPRODUCTIVE EFFECTS: A minor component of this product caused fetotoxicity in animals at doses which were maternally toxic.

MUTAGENICITY: Not suspected to be mutagenic.

SYNERGISTIC MATERIALS: No data available.

POTENTIAL HEALTH EFFECTS

EYES: Insufficient data available.

SKIN: Insufficient data available.

SKIN ABSORPTION: Insufficient data available.

INGESTION: May be harmful if swallowed. In the case of vomiting, product may be aspirated into lungs causing chemical pneumonia, which in extreme cases could lead to death. See section 4, First Aid Measures, for more information.

ASPIRATION HAZARD: Yes.

INHALATION: May be harmful if prolonged inhalation occurs.

MEDICAL CONDITIONS AGGRAVATED: Preexisting eye, skin, and respiratory conditions

GENERAL COMMENTS: Refer to Section 3 for additional information on potential health effects.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: A component of this product has high aquatic toxicity.

PERSISTENCE AND DEGRADABILITY: A component of this product is considered not readily biodegradable.

BIOACCUMULATIVE POTENTIAL: Insufficient data available.

MOBILITY IN SOIL: Insufficient data available.

OTHER ADVERSE EFFECTS: No data available.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Recovered liquids may be sent to a licensed reclaimer or incineration facility. Contaminated material must be disposed of in a permitted waste management facility. Consult federal, state and local authorities for approved procedures.

EMPTY CONTAINER: Not applicable.

RCRA/EPA WASTE INFORMATION: Contains material(s) that are ignitable wastes as defined by RCRA.

14. DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquid, NOS
TECHNICAL NAME: Synthetic Hydrocarbon
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: UN1993
PACKING GROUP: III
LABEL: Flammable Liquid (Class 3) when applicable.
OTHER SHIPPING INFORMATION: No data available.

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Flammable Liquid, NOS
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: UN1993
PACKING GROUP: III
LABEL: Flammable Liquid (Class 3) when applicable.
OTHER SHIPPING INFORMATION: No data available.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Flammable Liquid, NOS
PRIMARY HAZARD CLASS/DIVISION: 3
UN/NA NUMBER: UN1993
PACKING GROUP: III
LABEL: Flammable Liquid (NOS) Class 3, label required when shipped by air.
PLACARD: Consult applicable regulations
IATA NOTE: Consult applicable regulations on packaging requirements and quantity limitations.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: Yes. **PRESSURE GENERATING:** No. **REACTIVITY:** No. **ACUTE:** Yes. **CHRONIC:** No.

313 REPORTABLE INGREDIENTS: Not applicable.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Not applicable.

REPORTABLE SPILL QUANTITY: Not applicable.

RCRA STATUS: See section 13.

MEXICO

Regulated for transportation

STATE REGULATIONS

MASSACHUSETTS

Contains one or more substances regulated by the Massachusetts Substance List.

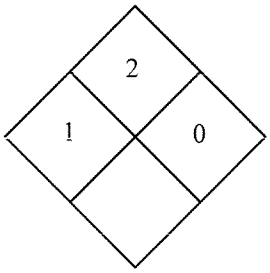
CALIFORNIA

PROPOSITION 65 STATEMENT: This product contains no ingredients known to the state of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

HMIS RATINGS	
HEALTH:	1
FLAMMABILITY:	2
REACTIVITY:	0
PERSONAL PROTECTION:	B

NFPA RATINGS



SDS Revision Date: July 22, 2015

CALED
The Cleaner's Choice

CALED CHEMICAL

Safety Data Sheet
Cinch

SECTION 1: Identification

Product identifier

Product name	Cinch
Product number	0500
Brand	Caled Chemical

Supplier's details

Name	Caled Chemical
Address	26 Hanes Dr Wayne, NJ 07470 USA
Telephone	800-652-2533
Fax	888-652-2533
email	Info@caledclean.com

Emergency phone number(s)

Chemtrec 1-800-424-9300

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Skin corrosion/irritation (chapter 3.2), Cat. 2

GHS label elements, including precautionary statements

Pictogram



Signal word	**Warning**
Hazard statement(s)	
H315	Causes skin irritation
H319	Causes serious eye irritation
Precautionary statement(s)	
P264	Wash thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352	IF ON SKIN: Wash with plenty of water/...
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321	Specific treatment (see section 4).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Distillates (petroleum), hydrotreated light

Concentration	10 - 15 % (Weight)
CAS no.	64742-47-8

2. ETHYLENE GLYCOL MONOBUTYL ETHER

Concentration	10 - 15 % (Weight)
EC no.	203-905-0
CAS no.	111-76-2
Index no.	603-014-00-0

- Acute toxicity (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 2
- Skin corrosion/irritation (chapter 3.2), Cat. 2

H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur. May cause burning of the mucous membranes.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water, dry chemicals.

Specific hazards arising from the chemical
None known.

Special protective actions for fire-fighters
Wear protective clothing and use a self-contained breathing apparatus in confined areas.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear safety glasses and gloves.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling
Wear safety glasses and gloves.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8: Exposure controls/personal protection

Control parameters

1. 2-Butoxyethanol (CAS: 111-76-2)
PEL (Inhalation): 50 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. 2-Butoxyethanol (CAS: 111-76-2)
PEL (Inhalation): 240 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

3. 2-Butoxyethanol (CAS: 111-76-2)
PEL (Inhalation): 20 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

4. 2-Butoxyethanol (CAS: 111-76-2)
REL (Inhalation): 5 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection
Wear saftey glasses.

Skin protection
Wear protective gloves.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form	Clear yellow liquid
Odor	Mild
Odor threshold	
pH	8.0-8.9
Melting point/freezing point	
Initial boiling point and boiling range	212 degrees F.
Flash point	160 degrees F.
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability limits	
Vapor pressure	ND
Vapor density	
Relative density	.950
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Decomposition temperature	
Viscosity	
Explosive properties	
Oxidizing properties	

SECTION 10: Stability and reactivity

Conditions to avoid
None known.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Burning may produce carbon monoxide or nitrous oxide.

SECTION 11: Toxicological information

Information on toxicological effects

Skin corrosion/irritation
May cause skin irritation and skin de=fatting.

Serious eye damage/irritation
May cause eye irritation or eye burning.

SECTION 12: Ecological information

Toxicity
Not available.

Persistence and degradability
Not available.

Bioaccumulative potential
Not available.

Mobility in soil
Not available.

Results of PBT and vPvB assessment
Not available.

Other adverse effects
Not available.

SECTION 13: Disposal considerations

Disposal of the product
Contact local authorities for disposal regulations.

Disposal of contaminated packaging
Contact local authorities for disposal regulations.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

New Jersey Right To Know Components
Common name: 2-BUTOXY ETHANOL
CAS number: 111-76-2

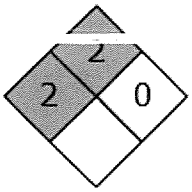
Pennsylvania Right To Know Components

Chemical name: Ethanol, 2-butoxy-
CAS number: 111-76-2

HMIS Rating

Cinch	
HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

NFPA Rating



SECTION 16: Other information

Further information/disclaimer
DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Caled Chemical be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Caled Chemical has been advised of the possibility of such damages.

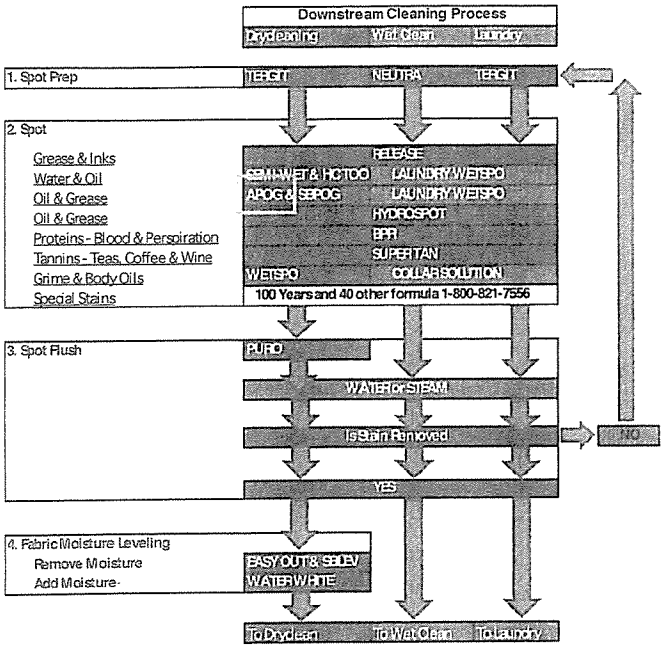
Adco
QUALITY • INTEGRITY • DEPENDABILITY

STAIN REMOVAL

APOG

Paint, Oil & Grease Remover

Spotting Process - Brand Selection



APOG

(AMERICAN PAINT, OIL & GREASE REMOVER)

ALL PURPOSE PAINT REMOVER
FOR USE IN DRYCLEANING ONLY
Removes Paint, Varnish, Grease, Shoe Polish, Tar, Salad Oils, Cosmetics, Ink, and many other hard to remove stains.

6

DIRECTIONS FOR USE:
1. Wet stain with PURO or solvent.
2. Apply AMERICAN*, tamp with spotting brush, allowing time for hardened surface to soften.
3. Flush with solvent or PURO and clean in wheel.

PENETRATING ACTION: Penetrates and lubricates, softening hardened stains for easy removal.
FREE RINSING: Rinse freely with solvent.

*On pigment prints and bright colors, first test for dye fastness

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Adco Spotting System

Adco's stain spotting system, depicted in the flow chart above, demonstrates the relationship of the spotting chemicals used to:

1. prepare the garment
2. spot the garment
3. flush out the spotting agent
4. stabilize the garments moisture

Red products are for use in dry cleaning only, blue products are designed for wet cleaning or laundry only, and purple products can be used for either water or solvent based processing.

APOG, encircled in the chart above, is used to remove grease and oil stains.

APOG

		Code	Description
Spotter			
	Cleaning	S - HP	Perc or Hydrocarbon
		S - G	Green Earth
	Spotting	SP - 3	Grease Remover
Economics			
		T - 1	Integrated Savings

Adco
QUALITY • INTEGRITY • DEPENDABILITY

1909 W. Oakridge Albany, GA 31707 | Phone: 800.821.7556 | adco-inc.com

ChemBrite
"YOUR reputation spotless!"
PO Box 25188
Anaheim, CA 92825

Material Safety Data Sheet

I. Identification

Product Name:	Aqua P.O.G.
Chemical Type:	Spot and Stain Remover
Information Phone Number	(618) 524-6600
Emergency Telephone Number:	(800) 424-9300 (CHEMTREC) For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident - 24 Hours.

II. Hazardous Ingredients/Identity Information

Hazardous Component	CAS NO. of Component	ACGIH TWA of Component	OSHA PEL	Approximate Percentage
2- Propanol	67-63-0	400 ppm	400 ppm TWA	<5.0%

This product does NOT contain components that are reportable under SARA Title III.

III. Physical/Chemical Characteristics

Boiling Point	~200° F	Vapor Density (AIR = 1))	Not Determined
Specific Gravity (H_2O = 1)	0.9426	Vapor Pressure (mm Hg)	Not Determined
Solubility in Water	Insoluble	Evaporation Rate (Butyl Acetate = 1)	<1.0
Appearance and Odor:	Clear, slight yellow liquid. Fresh odor.		

IV. Fire and Explosion Hazard Data

Flash Point:	Not applicable
Extinguishing Media:	Not applicable
Special Firefighting Procedure:	None
Unusual Fire & Explosion Hazards:	None known

V. Reactivity Data

Stability:	Stable.
Incompatibility:	Strong oxidizing agents
Hazardous Decomposition Products:	None known
Hazardous Polymerization:	Will not occur.

Product Name: Aqua P.O.G.

VI. Health Hazard Data

Effects of Overexposure:

Eyes:	Can cause mild to moderate irritation and redness.
Skin:	Prolonged or repeated contact may cause irritation.
Breathing:	Excessive inhalation of vapors may cause bronchial irritation.
Swallowing:	Can cause gastrointestinal distress, vomiting, diarrhea.

First Aid Procedures:

Eyes:	Flush with water for at least 15 minutes. Obtain medical attention if irritation persists.
Skin:	Wash affected area with soap and water.
Inhalation:	Remove individual to fresh air.
Ingestion:	Do NOT induce vomiting. Obtain medical attention.

VII. Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: Small and large spills should be contained and absorbed with an absorbent material. Place in plastic or metal containers. Dispose of properly.

Waste Disposal Method: Dispose in accordance with all local, state, and federal regulations. Dispose as non-hazardous waste.

Precautions in Handling or Storage: Keep containers closed. Avoid breathing vapors. Keep away from heat.

VIII. Control Measures

Respiratory Protection:	Not normally needed. Use an organic vapor respirator if ventilation is inadequate.
Ventilation :	General exhaust should be sufficient.
Protective Gloves:	Not normally needed. Use chemical resistant gloves such as viton, nitrile, or neoprene if contact is prolonged.
Eye Protection :	Not normally needed. Use goggles or face shield if splashing is likely.
Other Protective Equipment:	None.

IX. Comments and Disclaimer

FOR INDUSTRIAL USE ONLY
Keep Out of Reach of Children.
Maintain Good housekeeping.
Wash thoroughly after handling. Keep out of eyes.

The information contained herein in this document is believed to be accurate by the best of ChemBrite LLC knowledge, interpretation and belief. The information is reliable as of the date of this document. Chembrite, LLC does not warrant or guarantee the accuracy of the information contained herein. ChemBrite LLC shall not be liable for any loss or damage arising out of any use or misuse of this document.

Edition Date: July 7, 2011

Replaces: Not applicable.

Signature of Preparer: Arthur Boykin

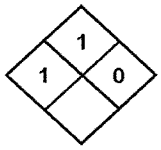
MATERIAL SAFETY DATA SHEET

PRODUCT **BPR - Blood & Protein Remover**

Adco™

NFPA HAZARD RATINGS*

Health	1	Slight health hazard
Fire	1	Slightly combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-7556 (8-5 M-F)
Intended Product Use: Stain removal agent for drycleaning and laundry
Synonyms: Blood and protein remover

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Ammonium hydroxide (aqua ammonia)	<1	1336-21-6	50 ppm TWA	oral: 350 mg/kg (rat)
Potassium hydroxide (dilute solution)	<2	1310-58-3	2 mg/m3 Ceiling	oral: 273 mg/kg (rat)
				dermal: 4200 mg/kg (rabbit)

SECTION 3: PHYSICAL DATA

Appearance: Light yellow liquid
Odor: Bland, trace of ammonia
Specific Gravity (20° C): 1.008
pH (Straight): 9.5-10.2
Boiling Point: 212°F
Solubility in Water: Miscible
Vapor Pressure (mm Hg): No data
Vapor Density: Heavier than air

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): >230 (TCC)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Dry chemical, carbon dioxide, foam, water fog. Compatible with all types.
Special Fire Fighting Procedures: Avoid directing strong stream of water into material - may cause foaming. Wear self-contained breathing apparatus when fighting fires in confined areas.
Unusual Fire and Explosion Hazards: Exposure to fire or high temperatures may produce noxious, irritating or toxic fumes.

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Storage at temperatures above 120°F (48.8°C)
Incompatibility (materials to avoid): Strong oxidizers
Hazardous Decomposition Products: Burning produces toxic, irritating fumes
Hazardous Polymerization: Will not occur

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Low

Effects of Overexposure:
Acute: May cause drying or irritation if splashed into eyes or on prolonged or repeated contact with skin. Inhaling vapors may cause temporary discomfort.
Chronic: None known

Carcinogenicity: Trace component (<0.01%) is listed by ACGIH, IARC and OSHA as suspected carcinogen.

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
None	Slight eye and skin	None reported	Trace component listed by ACGIH, IARC and OSHA
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.

Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in closed containers at temperatures below 120°F. Do not store in aluminum containers.

SPILL OR LEAK PROCEDURES: Small spills - flush to sewer with water. Large spills - soak up on absorbent material and transfer to containers for disposal as nonhazardous waste.

WASTE DISPOSAL METHOD: Nonhazardous. Flush to sewer or dispose of material and container in municipal landfill in compliance with all local, state and federal regulation.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Splashing into eyes or prolonged or repeated contact with skin may cause irritation.

FIRST AID:

In case of contact, flush eyes for 15 minutes with water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove person to fresh air.

Eyes: Flush eyes for 15 minutes with water.

Skin: Wash off of skin with soap and water.

Ingestion: If swallowed, do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 16, 2010

Replaces MSDS of: August 25, 2008

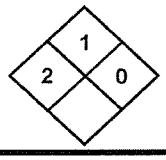
MATERIAL SAFETY DATA SHEET

PRODUCT SEMI WET SPOTTER

Adco™

NFPA HAZARD RATINGS*

Health	2	Moderate health hazard
Fire	1	Slightly combustible
Stability	0	Stable



SECTION 1: PRODUCT INFORMATION

Manufacturer: ADCO Cleaning Products LLC, 900 W. Main, Sedalia, MO 65301 (660) 826-3300
EMERGENCY TELEPHONE NUMBERS: CHEMTREC (800) 424-9300 24 HRS 7 DAYS A WEEK; ADCO (800) 821-3566 (8-5 M-F)
Intended Product Use: Stain removal agent for laundry and drycleaning
Synonyms: None

SECTION 2: HAZARDOUS INGREDIENTS

Chemical Name	%	CAS #	OSHA PEL	LD 50
Trichloroethylene	>100	79-01-6	50 ppm TWA	oral: 4920 mg/kg (rat)

SECTION 3: PHYSICAL DATA

Appearance: Semi-clear water white liquid
Odor: Sweet, like ether
Specific Gravity (20° C): 1.25
pH (20:80 in IPA/H2O Soln.): 7.0 - 7.5
Boiling Point: 188°F
Solubility in Water: Forms an emulsion
Vapor Pressure (mm Hg): 60 mm Hg @ 20°C
Vapor Density: No data

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method)(°F): >230 (TCC)
Upper Flammable Limit: No data
Lower Flammable Limit: No data
Extinguishing Media: Self extinguishing
Special Fire Fighting Procedures: Use water spray to keep fire-exposed containers cool. Wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Vapors may develop a flammable atmosphere in confined areas. May decompose to hydrochloric acid at high temperatures in fire.

SECTION 5: REACTIVITY DATA

Stability: Stable
Conditions to Avoid: High temperatures may induce thermal decomposition. Avoid open flames. Welding arcs should not be used.
Incompatibility (materials to avoid): Strong oxidizers, aluminum, or zinc coated containers.
Hazardous Decomposition Products: Hydrogen chloride, small amounts of phoscene, irritating fumes at high temperatures.

Hazardous Polymerization: Will not occur.

SECTION 6: HEALTH HAZARD DATA

Toxicity (Estimated): Very low: oral LD 50: above 4920 mg/kg skin absorption

Effects of Overexposure:
Acute: Contact with eyes, prolonged or repeated contact with skin may cause irritation, redness, and drying. Breathing high concentration of vapors may cause irritation of the nose and throat, dizziness, nausea or loss of coordination.
Chronic: None

Carcinogenicity: Trichloroethylene component rated "2A" IARC - "C" NTP - human carcinogen on CA list

*Hazard ratings and other information are based on latest available information from tests on product or ingredients of mixtures. The data and evaluations are accurate to the best of ADCO's knowledge. No guarantee or liability is expressed or implied.

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
50 ppm TWA (trichloroethylene)	Slight eye and skin	None reported	Trichloroethylene component rated "2A" IARC - "C" NTP - human carcinogen on CA list
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
No effects reported	No effects reported	None reported	None reported

Based on known toxicity of components. No test data available on mixture.

SECTION 7: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

Respiratory Protection: None required when used as directed with adequate ventilation.
When cleaning up large spills in confined areas, self-contained breathing apparatus is recommended.

Ventilation: Normal industrial ventilation is adequate.

Protective Gloves: Ordinarily not needed. Use chemically resistant gloves when contact is prolonged or frequent.
Eye Protection: Use goggles or face mask if splashing is likely.

Other protection equipment ordinarily not needed. Availability of eye washes and adequate ventilation in work areas recommended.

STORAGE AND HANDLING: Store in closed containers in a well ventilated area. Aluminum equipment should not be used for storage or transfer. Keep containers closed when not in use.

SPILL OR LEAK PROCEDURES: Small spills - wipe up. Large spills - soak up on absorbent material and transfer into resealable containers for disposal.

WASTE DISPOSAL METHOD: Liquid product or absorbents containing this product must be disposed of in accordance with applicable local, state, and federal regulations for chlorinated hydrocarbons.

RECOMMENDED PRECAUTIONARY LABELING:

CAUTION:

Use with adequate ventilation. Avoid contact with skin and eyes. Avoid prolonged breathing of vapors. Harmful if swallowed.

FIRST AID:

If overcome by vapors, remove person to fresh air. In case of contact with eyes, flush for 15 minutes with water. Wash off of skin with soap and water. If swallowed, do NOT induce vomiting.

KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

This product is intended for professional use only by trained personnel.

SECTION 8: FIRST AID

Inhalation: Remove person overcome by vapors to fresh air.
Eyes: Flush eyes 15 minutes with water.
Skin: Wash off of skin with soap and water.

Ingestion: Do NOT induce vomiting.

IF SYMPTOMS PERSIST, SEEK MEDICAL ASSISTANCE

SECTION 9: SARA TITLE III

NOTE: This product does contain some components which are under the reporting requirements of SARA Title III, Section 313. If you are required to report discharges using Form R, SARA Title III, Section 313, information is available on amounts of reportable components.

SECTION 10: PREPARATION DATE

This information is provided for guidance only based on information we have compiled. No guarantee of accuracy or completeness is expressed or implied.

ADCO RESEARCH DEPARTMENT

Prepared by: Julie D. Hirner
Julie D. Hirner

Date: April 19, 2010

Replaces MSDS of: November 7, 2008

NCP® JINX INK®
SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NCP® JINX INK® **CHEMICAL FAMILY:** Ester Ether Family

RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE:
IDENTIFIED USES: Removes Ball Point Pen Ink Stains, Stamp Pad, Writing, Marking, Duplicating, Felt-Tip pen, Colored Art Inks, and Toner from garments, material and carpets.
ALSO REMOVES: Fingernail Polish, Adhesives, Glue, Lacquers, Paste Shoe Polish, Gum, and Fabric Chalk.

COMPANY IDENTIFICATION:

NEUHAUS CHEMICAL PRODUCTS, INC.
5727 MOBUD
SAN ANTONIO, TEXAS, USA 78238-1820
(210) 684-2411 TELEPHONE (210) 684-2433 FAX

EMERGENCY TELEPHONE NUMBER: INFOTRAC 1-800-535-5053 (USA AND CANADA).

SECTION 2 - HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

GLOBALLY HARMONIZED SYSTEM CLASSIFICATION:

Flammable Liquid – Category 3 [Flash point ≥ 23°C (73°F) and ≤ 60°C (140°F)].
Eye irritation – Category 2B (Mild Irritant – Reversible in 7 days).
Skin Irritation – Category 3 (Mild Irritant – Causes mild skin irritation).

GLOBAL HARMONIZED SYSTEM CLASSIFICATION SCALE: (1 = severe hazard, 4 = slight hazard).

LABEL ELEMENTS:

HAZARD PICTOGRAMS:



SIGNAL WORD: Warning

HAZARD STATEMENTS:

Flammable liquid and vapour. Causes eye irritation. Causes mild skin irritation.

PRECAUTIONARY STATEMENTS:

PREVENTION:
Keep away from heat/sparks/open flames/and hot surfaces. No smoking.
Store in a cool, well-ventilated place.
Wash hands thoroughly after handling.
Take precautionary measures against static discharge.
Keep out of the reach of children.

RESPONSE:
IF INHALED: If symptoms of over-exposure develop, move person to fresh air and keep comfortable for breathing. Call a physician if symptoms do not improve.
IF ON SKIN (OR HAIR): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing for 15 minutes. If eye irritation persists, get medical advice/attention.
IF SWALLOWED: Do NOT induce vomiting. If conscious, give the person two (2) glasses of water. Get medical attention immediately.
IN CASE OF FIRE: Use dry chemical fire extinguishers, carbon dioxide (CO_2), or alcohol-resistant foam for extinction.
DISPOSAL: Dispose of contents and container in accordance with local / regional / national / international regulations.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

SYNONYMS: Esther Ether Family.

This product is a mixture.

MATERIAL/COMPONENTS	CAS #	CAS NAME	APPROXIMATE %
Isopropyl Acetate	108-21-4	Isopropyl Acetate	10-25%

As per paragraph (i) 29 CFR 1910.1200, the formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition has been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i). This product is considered non-hazardous and non-restricted. This product is not considered to be a carcinogen.

SECTION 4 - FIRST AID MEASURES

DESCRIPTION OF NECESSARY FIRST AID MEASURES:

GENERAL ADVICE: If exposed or concerned: Consult a physician / doctor if necessary.
INHALATION: If symptoms of overexposure develop, move person to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms do not improve.
SKIN CONTACT: Rinse skin with water / shower. If spilled on clothing, remove all contaminated clothing immediately. Wash contaminated clothing before reuse.
EYE CONTACT: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing for 15 minutes. If pain, irritation, or vision problems persist, see an ophthalmologist immediately. Suitable emergency eye wash facility should be immediately available.
INGESTION: If swallowed, check to see if the person is conscious. If conscious, give the person two (2) glasses of water. Do NOT induce vomiting. Get medical attention immediately. If person is unconscious, do NOT give anything by mouth. Get medical attention immediately.

MOST IMPORTANT SYMPTOMS / EFFECTS, BOTH ACUTE AND DELAYED:
Aside from the information found under "Description of First Aid Measures" (above) and "Indication of Immediate Medical Attention and Special Treatment Needed" (below), any additional important symptoms and effects are described in Section 11: "Toxicology Information".

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:
NOTES TO PHYSICIAN: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Skin contact may aggravate preexisting dermatitis. Repeated excessive exposure may aggravate preexisting lung disease.

SECTION 5 - FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use dry chemical fire extinguishers, carbon dioxide (CO_2), or alcohol-resistant foam (ATC type) fire extinguishers for extinction. Can use water fog or fine spray.

UNSUITABLE EXTINGUISHING MEDIA: Do not use solid water stream. Straight or direct water streams may not be effective to extinguish fire.

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide (CO), carbon dioxide (CO_2).

UNUSUAL FIRE & EXPLOSION HAZARDS: Flammable vapor. Vapors from this product may travel along the ground for some distance and can be ignited by heat, pilot lights, etc., and flash back to the source of vapors.

ADVICE FOR FIREFIGHTERS:
FIRE FIGHTING PROCEDURES: Isolate fire and deny unnecessary entry. Product may be carried across water surface spreading fire or contracting any ignition source.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: If more than a small fire, wear positive pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE:
Eliminate all sources of ignition in the vicinity of spill to avoid fire or explosion. Ventilate area of leak or spill. No smoking in area. Remove immediately all contaminated clothing. Refer to section 7, "Handling", for additional precautionary measures. For additional information, refer to section 8, "Exposure Controls and Personal Protection".

ENVIRONMENTAL PRECAUTIONS: WASTE DISPOSAL: Dispose of waste according to the local / regional / national / international regulations that apply in your location. Treat waste as flammable material, even when absorbed in rags or absorbent.

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: ***FOR SMALL SPILLS OR DRIPS***: Wipe liquid up, or absorb with non-combustible absorbent, such as sand or vermiculite. Place absorbent in a metal container with a tight lid for disposal. ***FOR LARGE SPILLS***: Absorb liquid with a non-combustible absorbent. Scoop up absorbent and liquid, and place in a metal container with a tight lid for disposal. See Section 13, "Disposal Considerations", for additional information.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wash hands thoroughly after handling. Take precautionary measures against static discharge. Avoid eye contact or prolonged skin contact. Keep out of the reach of children. Treat all chemicals with caution and respect, and always use only as directed.

CONDITIONS FOR SAFE STORAGE:
STORAGE CLASS: General
STORAGE REQUIREMENTS: Store in a cool, well-ventilated place. Keep container sealed when not in use.
PACKAGING MATERIAL: HDPE bottles.
UNSUITABLE PACKAGING MATERIAL: Not determined.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

EXPOSURE LIMITS: OSHA Z-1 TWA: 220 mg/m^3 58 ppm **ACGIH TLV-TWA:** 23 ppm **ACGIH STEL:** 46 ppm

EXPOSURE CONTROLS:
ENGINEERING CONTROLS: Normal room ventilation is sufficient for normal conditions of use. For high concentrations of vapors, provide general and/or local exhaust ventilation to control exposure.

INDIVIDUAL PROTECTION MEASURES:
EYE / FACE PROTECTION: Face shield is not needed for normal use; however, safety glasses with side shields or safety goggles are recommended.
SKIN / HAND PROTECTION: None needed in normal use. To protect sensitive or damaged skin, wear neoprene gloves.
RESPIRATORY PROTECTION: None normally needed. For exposure to very high concentrations, wear a NIOSH approved full-face piece respirator with organic vapor cartridges.
OTHER PROTECTIVE EQUIPMENT OR CLOTHING: None needed in normal use. Provide eye bath in case of accidental contact.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, pale yellow liquid
COLOR: Pale yellow
STATE: Liquid
ODOR CHARACTERISTICS: Musty, sweet, fruity odor
pH: 6.0 - 6.65
VISCOSITY: Not Available
SPECIFIC GRAVITY (WATER = 1.0 @ 68°F): 0.966
VAPOR DENSITY (AIR = 1.0 @ 75°F): 4.31
VAPOR PRESSURE (mm Hg @ 68°F): 0.96
UPPER FLAMMABLE LIMIT (% BY VOLUME): 8.5
AUTO-IGNITION TEMPERATURE: Not Available

MELTING POINT: -100°F (-73°C)
BOILING POINT (760 mm Hg): 253.2°F (123°C)
FLASH POINT (METHOD): 100°F (37.8°C) CLEVELAND OPEN CUP (D92)
FREEZING POINT: -100°F (-73°C)
PERCENT VOLATILITY: Not Available
EVAPORATION RATE (BAc = 1.0 @ 120°F): 0.4
SOLUBILITY IN WATER (w/w) @ 50°F: Complete
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not Available
SOLUBILITY IN ACETONE: Not Available
LOWER FLAMMABLE LIMIT (% BY VOLUME): 1.3
DECOMPOSITION TEMPERATURE: Not Available

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY: No data available.
CHEMICAL STABILITY: Stable under recommended storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS/POLYMERIZATION: Hazardous polymerization will not occur.
CONDITIONS TO AVOID: Heat, sparks, and open flames.
INCOMPATIBLE MATERIALS: Avoid contact with strong acids, strong bases, alkalis, strong oxidizers, and reducing materials.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Decomposition products can include and are not limited to: Carbon monoxide (CO), carbon dioxide (CO_2), aldehydes, ketones, and organic acids

SECTION 11 - TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:
ACUTE ORAL TOXICITY: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
LD_{50}, Rat, ≥ 5,950 mg/kg
ACUTE DERMAL TOXICITY: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
LD_{50}, Rabbit, ≥ 10,800 mg/kg
ACUTE INHALATION TOXICITY: No adverse effects are anticipated from single exposure to vapor. In confined or poorly ventilated areas, high concentrations of vapor may cause dizziness and/or drowsiness if using large amounts of this product.
LC_{50}, Rat, female, ≥ 75.9 mg/L 4 hour vapour.

SKIN CORROSION / IRRITATION:
SKIN: Prolonged contact may cause slight skin irritation with local redness. Prolonged or repeated exposure to this product may cause defatting of the skin leading to drying or flaking of skin, and may aggravate existing dermatitis. This product is not known to cause allergies.

SERIOUS EYE DAMAGE / EYE IRRITATION:
EYES: May cause slight temporary eye irritation, discomfort, and redness. Corneal injury is unlikely. Serious/permanent damage is not expected to occur.

SENSITIZATION:
FOR SKIN SENSITIZATION: Did not cause allergic skin reactions when tested in humans or guinea pigs. This product is not known to cause allergies.
FOR RESPIRATORY SENSITIZATION: No adverse effect observed. This product is not known to cause allergies. Inhalation of high concentrations of this product may aggravate pre-existing asthma.

GERM CELL MUTAGENICITY: In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

CARCINOGENICITY: No chemicals in this product are listed by NTP, IARC, OSHA, OR ACGIH as a carcinogen.

REPRODUCTIVE TOXICITY: No information available.

DELAYED AND IMMEDIATE EFFECTS / CHRONIC EFFECTS FROM SHORT-TERM AND LONG-TERM EXPOSURE:

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE):
Not expected to cause organ damage from a single exposure.
High concentrations of this product may cause slight dizziness and/or drowsiness.
Route of Exposure: Inhalation
Target Organs: Central Nervous System.

SPECIAL TARGET ORGAN TOXICITY (REPEATED EXPOSURE):
Based on Isopropyl Acetate. Kidney effects have been observed in male rats. However, these effects are believed to be species specific and unlikely to occur in humans.

TERATOGENICITY: Did not cause birth defects or any other fetal effects in laboratory animals.

ASPIRATION HAZARD: Based on physical properties, not likely to be an aspiration hazard.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicological information on this product or its components appear in this section when such data is available.

TOXICITY:
ACUTE TOXICITY TO FISH: Material is practically non-toxic to aquatic organisms on an acute basis.
(LC50/EC50/EL50/LL50 > 100 mg/L in the most sensitive species tested).
ACUTE TOXICITY TO AQUATIC INVERTEBRATES: This product is not classified. Material is readily biodegradability and non-toxic to aquatic organisms on an acute basis. Passes OECD test(s) for ready biodegradability.

CHRONIC AQUATIC TOXICITY: Not classified, based on readily biodegradability and low acute toxicity.

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES: Low acute toxicity to aquatic invertebrates.

TOXICITY TO ALGAE / AQUATIC PLANTS: This material has low toxicity to algae and/or aquatic plants.

TOXICITY TO BACTERIA: EC_{50}, Bacteria, 16 Hour, ≥ 3,670 mg/L.

TOXICITY TO FISH (CHRONIC TOXICITY): No data available.

TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES (CHRONIC TOXICITY): Chronic toxicity expected to be low.

PERSISTENCE AND DEGRADABILITY:
BIODEGRADABILITY: Material is readily biodegradable. Passes OECD test(s) for Readily biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s) for inherent biodegradability).

BIODEGRADATION: 90%
EXPOSURE TIME: 28 days
METHOD: OECD Test Guideline 301E or Equivalent.
10-DAY WINDOW: Pass

BIODEGRADATION: > 90%
EXPOSURE TIME: 5.5 days
METHOD: OECD Test Guideline 302B or Equivalent.

MOBILITY IN SOIL: Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient (Koc): 19 Estimated.

RESULTS OF PBT AND vPvB ASSESSMENT: This product does not contain PBT or vPvB substances.

OTHER ADVERSE EFFECTS: No additional information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL PROCEDURES: For small spills or drips, mop or wipe up and dispose of in DOT approved container. For large spills, absorb with non-combustible material and place residue in DOT approved waste container. All disposal practices must be in compliance with all Federal, State/Provincial and Local laws and regulations. Waste characterizations and compliance with applicable laws are solely the responsibility of the waste generator. For unused & uncontaminated product, the preferred method is to send to a licensed waste management company for disposal.

SECTION 14 - TRANSPORT INFORMATION

UN-NUMBER: Not Regulated.

UN PROPER SHIPPING NAME: Not Regulated.

TRANSPORT HAZARD CLASS(ES): Not Regulated.

PACKING GROUP: As per 173.150 (B) (3) – Packing Group III

ENVIRONMENTAL HAZARD(S): Not Regulated.

SPECIAL PRECAUTION TO USES: See section 7.

SHIPPING DOT CLASSIFICATION: 48580 Sub. 3 Class 55 (COMPOUNDS, CLEANING, LIQUID). Non-Hazardous. Non-Restricted. As stated in 49 CFR, 173.150 (B) (F): This product is shipped in: Limited Quantities and does not have to be labeled as combustible.

WARNING LABELS: None needed as per: 49 CFR, 173.150 (B) (F).

CLASSIFICATION FOR SEA TRANSPORT (IMO-IMDG): Ocean Voyage Commodity #3402.11.0000 .

SECTION 15 - REGULATORY INFORMATION

WORKPLACE CLASSIFICATION: Not Regulated.

SAFETY, HEALTH AND ENVIRONMENTAL REGULATION / LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE OF THIS PRODUCT:

This Safety Data Sheet complies with the requirements of 29 CFR § 1910.1200.
This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA) or are exempt from reporting.

CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

COMPONENT	CAS #	AMOUNT
Ethylene glycol monoethyl ether	110-80-5	< 300 ppm

PENNSYLVANIA REGULATIONS: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

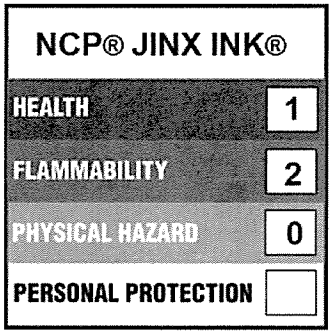
CANADIAN REGULATIONS: This material or all of its components are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) classification for this product is: B2 – Flammable liquid with a flash point of < 37.8°C (100°F).

SECTION 16 - OTHER INFORMATION

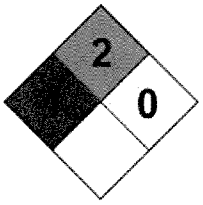
HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) CLASSIFICATION:

HEALTH (BLUE): **1** - Irritation or minor reversible injury possible. Poses no health hazard, no precautions necessary and would offer no hazard beyond that of ordinary combustible materials.
FLAMMABILITY (RED): **2** - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100°F but below 200°F. (Classes II & IIIA).
PHYSICAL HAZARDS (ORANGE): **0** - Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.
PERSONAL PROTECTION (WHITE): **None**



NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

HEALTH (BLUE): **1** – Exposure would cause irritation with only minor residual injury.
FLAMMABILITY (RED): **2** – Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 38°C and 93°C (100°F and 200°F).
INSTABILITY/REACTIVITY (YELLOW): **0** – Normally stable, even under fire exposure conditions, and is not reactive with water.
SPECIAL NOTICE (WHITE): **None**



This Safety Data Sheet contains the following revisions: Updates made in accordance with implementation of GHS requirements.

DATE OF PREPARATION: 01 June 2015

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

END OF SDS

SAFETY DATA SHEET – **InkGo®**

1. Identification

1.1 Product Identifier: InkGo

1.2 Recommended Use of the Chemical and Restrictions on Use: Removes ink stains & adhesives from textiles. For industrial/institutional use only. Do not use at home. Keep out of reach of children.

1.3 Details of the Supplier of the Safety Data Sheet:
A. L. Wilson Chemical Co., PO Box 207, Kearny, NJ 07032, USA
Telephone: 201-997-3300
E-mail: SDS@ALWilson.com

1.4 Emergency Telephone Number:
Chemtrec: 800-424-9300 or 703-527-3887

2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Eye Damage – Category 1
Combustible – Category 4

2.2 Label Elements:

Contains: 2-(2 Butoxy Ethoxy) Ethyl Acetate [124-17-4], 2-(2 Propoxyethoxy) Ethanol [6881-94-3], DPNB [29911-28-2], 2-(2-Ethoxyethoxy) Ethyl Acetate [112-15-2], Petroleum Distillate [64742-47-8].

Hazard Pictograms:



Signal Word: Danger

Hazard Statements:
H318: Causes serious eye damage.

Precautionary Statements:

Prevention:
P102: Keep out of reach of children.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P308+P313: If exposed or concerned: Get medical advice/attention.
P301+P330+P331+P321: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
P303+P361+P353+P363: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
P234: Keep only in original container.
P405: Store locked up.

Disposal Considerations:
P501: Dispose of contents/container to waste collection point and in accordance to applicable regulations.

2.3 Other Hazards:
Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.
See section 8 for exposure limits.

3. Composition/Information on Ingredients

Name	CAS No.	Concentration
2-(2 Butoxy Ethoxy) Ethyl Acetate	124-17-4	20% ≤ C ≤ 30%
2-(2 Propoxyethoxy) Ethanol	6881-94-3	20% ≤ C ≤ 30%
DPNB (Dipropylene glycol n-butylether)	29911-28-2	20% ≤ C ≤ 30%
2-(2-Ethoxyethoxy) Ethyl Acetate	112-15-2	20% ≤ C ≤ 30%
Distillate (Petroleum) Hydrotreated Light	64742-47-8	5% ≤ C < 10%

4. First Aid Measures

4.1 Description of Necessary First Aid Measures:

General Information: If exposed or concerned: Get medical advice/attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact: Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most Important Symptoms/Effects, both Acute and Delayed:

Eye Contact: Causes severe eye damage.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: See section 4.1.

5. Fire-fighting Measures

5.1 Suitable Extinguishing Media: Use water, fog, foam, or Carbon Dioxide "CO_2" for fires in area.

5.2 Specific Hazards Arising from the Substance or Mixture: Not Determined.

5.3 Special Protective Action for Fire-fighters: Use appropriate Personal Protective Equipment when fighting chemical fires. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Additional Information: Use water spray to cool nearby containers exposed to fire.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Cordon off spill area. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

6.2 Environmental Precautions: Avoid release to the environment. Dispose of contents/container to waste collection point and in accordance to applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up: Use a universal absorbent material to collect waste and dispose to collection point and in accordance to applicable regulations.

7. Handling and Storage

7.1 Precautions for Safe Handling: Keep out of reach of children. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

7.2 Conditions for Safe Storage, Including any Incompatibles:

Storage Class: General

Store only in original container. Safely lock container in a cool and well ventilated place. Keep container sealed when not in use.

Packaging Material: Plastic.

Unsuitable Packaging Material: Not determined.

8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Exposure Limits Values

Name	Air Concentration USA ACGIH TLV (ppm)	Air Concentration USA OSHA TWA (mg/m^3)
Distillate (Petroleum) Hydrotreated Light	152*	1200 mg/m^3
DPNB (Dipropylene glycol n-butylether)	-	10 mg/m^3
*Data obtained and provided by supplier.		

8.2 Exposure Controls:

Engineering Measures: Work in a well ventilated area or under a ventilation hood.

8.3 Individual Protection Measures, such as Personal Protective Equipment:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Eye Protection: Wear closed safety glasses or chemical splash goggles.

Skin Protection: Wear protective clothing.

Respiratory Protection: None needed when used with adequate ventilation.

Hand Protection: Wear protective gloves. Gloves must be inspected prior to use. Replace if worn or damaged. Do not reuse.

Hygiene Measures: Wash thoroughly after handling. Do not smoke, eat or drink in work area.

9. Physical and Chemical Properties

Appearance: Clear Liquid.

Odor: Very Light Solvent.

Odor Threshold: Not Determined.

pH: >2 (10% by Weight in Water).

Melting Point/Freezing Point (°C): Not Determined.

Initial Boiling Point/Boiling Point Range (°C): Not Determined.

Flash Point (°C): >82.2 °C (>180 °F).

Evaporation Rate: Not Determined.

Flammability (solid, gas): Not Applicable.

Upper/Lower Flammability or Explosive Limits: Not Applicable.

Vapor Pressure: Not Determined.

Vapor Density: Not Determined.

Relative Density (Water = 1): 0.96 at 20 °C.

Solubility: Low Solubility in Water.

Partition Coefficient: n-Octanol/Water: Not Applicable.

Auto-ignition Temperature: Not Applicable.

Viscosity: Not Determined.

Explosive Properties: Not Applicable.

Oxidizing Properties: Not Applicable.

10. Stability and Reactivity

10.1 Reactivity: No information available.

10.2 Chemical Stability: Stable if used according to specifications.

10.3 Possibility of Hazardous Reactions: No information available.

10.4 Conditions to Avoid: Flames.

10.5 Incompatible Materials: Strong alkali, oxidizing and reducing agents.

10.6 Hazardous Decomposition Products: In case of fire: Carbon Dioxide, Carbon Monoxide, Oxides of Phosphorus.

11. Toxicological Information

Acute Toxicity: Data not available for mixture.

Skin Corrosion/Irritation: Causes severe skin irritation.

Serious Eye Damage/Eye Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: No information available.

Germ Cell Mutagenicity: No information available.

Carcinogenicity: Not listed by NTP, IARC, OSHA, or ACGIH as a carcinogen.

Reproductive Toxicity: No information available.

Specific Target Organ Toxicity – Single Exposure: No information available.

Specific Target Organ Toxicity – Repeated Exposure: No information available.

Aspiration Hazard: No information available.

Inhalation: No information available.

Subchronic/Chronic Toxicity: No information available.

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity: Not determined.

12.2 Persistence and Degradability: Biodegradable.

12.3 Bioaccumulative Potential: Not expected to bio-accumulate.

12.4 Mobility in Soil: No information available.

12.5 Results of PBT and vPvB Assessment: This product does not contain PBT or vPvB substances.

12.6 Other Adverse Effects: No data available.

13. Disposal Considerations

13.1 Disposal Methods:

Product (Any Residual Waste/Unused Product): Dispose of any residual product waste or unused product to waste collection point and in accordance to applicable regulations. Avoid release to the environment.

Packaging (White Plastic): After use, close empty bottle, and dispose of to waste collection point and in accordance to applicable regulations.

14. Transport Information

14.1 UN-Number: Not Regulated.

14.2 UN Proper Shipping Name: Not Regulated.

14.3 Transport hazard class(es): Not Regulated.

14.4 Packing group: Not Regulated.

14.5 Environmental Hazard(s): Not Regulated.

14.6 Special Precaution to User: See section 7.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

15.1 Safety Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Regulations:
All components are on TSCA.
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
SARA (311/312) HAZARD CATEGORIES: Fire
SARA 313: This product contains the following SARA 313 Toxic Release Chemicals.

Chemical Name	CAS Number	Concentration
2-(2 Butoxy Ethoxy) Ethyl Acetate*	124-17-4	20% ≤ C ≤ 30%
2-(2 Propoxyethoxy) Ethanol*	6881-94-3	20% ≤ C ≤ 30%
2-(2-Butoxyethoxy)Ethyl Acetate*	112-15-2	20% ≤ C ≤ 30%
*Subject to SARA, Title III Section 313 and 40 CFR 372 – (Glycol Ethers)		

16. Further Information

Abbreviations and Acronyms:
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Concentration (weight percent).
DOT = Department of Transportation (United States).
IMDG = International Maritime Dangerous Goods Code.
IARC = International Agency for Research on Cancer.
OSHA = Occupational Safety & Health Administration.
PBT = Persistent, Bioaccumulative and Toxic Substances.
ppm = parts per million.
OELV = Occupational Exposure Limits Values.
TLV = Threshold Limit Values.
TSCA = Toxic Substance Control Act.
TWA = Time-Weighted Average.
vPvB = very Persistent and very Bioaccumulative Substances.

The information contained herein is accurate to the best of our knowledge. A. L. Wilson Chemical Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

SAFETY DATA SHEET – **RustGo®**

1. Identification

1.1 Product Identifier: RustGo

1.2 Recommended Use of the Chemical and Restrictions on Use: Removes rust stains from textiles. For industrial/institutional use only. Do not use at home. Keep out of reach of children.

1.3 Details of the Supplier of the Safety Data Sheet:
A. L. Wilson Chemical Co., PO Box 207, Kearny, NJ 07032, USA
Telephone: 201-997-3300
E-mail: SDS@ALWilson.com

1.4 Emergency Telephone Number:
Chemtrec: 800-424-9300 or 703-527-3887

2. Hazards Identification

2.1 Classification of the Substance or Mixture.
Ingestion – Acute Toxicity – Category 2
Inhalation – Acute Toxicity – Category 2
Skin and Eye Corrosion/Irritation – Category 1 (Skin Corrosion 1A)
Skin Toxicity – Acute Toxicity – Category 1

2.2 Label Elements:

Contains: 5-12% Hydrofluoric Acid [7664-39-3], 8-16% Ammonium Bifluoride [1341-49-7], Water [7732-18-5].

Hazard Pictograms:



Signal Word: Danger

Hazard Statements:
H300+H330+H310: Fatal if swallowed, inhaled, or in contact with skin.
H314: Causes severe skin burns and eye damage.
H290: May be corrosive to metals.

Precautionary Statements:

Prevention:
P102: Keep out of reach of children.
P260: Do not breathe vapors.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P310: Immediately call a POISON CENTER or doctor/physician.
P301+P330+P331+P321: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Drink large quantities of water first, then milk or Milk of Magnesia. Never give anything by mouth to an unconscious person.
P303+P361+P353+P363: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:
P234: Keep only in original container.
P405: Store locked up.

Disposal Considerations:

P501: Dispose of contents/container to hazardous or special waste collection point and in accordance to applicable regulations.

2.3 Other Hazards:
Causes severe burns which may not be immediately painful or visible.
Specialized medical treatment required for all exposures.
Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.
See section 8 for exposure limits.

3. Composition/Information on Ingredients

Name	CAS No.	Concentration
Hydrofluoric Acid	7664-39-3	5% ≤ C ≤ 12%
Ammonium Bifluoride	1341-49-7	8% ≤ C ≤ 16%
Water	7732-18-5	75% ≤ C ≤ 85%

4. First Aid Measures

4.1 Description of Necessary First Aid Measures:

SPECIALIZED MEDICAL TREATMENT REQUIRED FOR ALL EXPOSURES. SEEK IMMEDIATE MEDICAL ATTENTION AND COMMUNICATE CLEARLY TO THE COMPETENT DOCTOR OR AUTHORITY THE TYPE AND LEVEL OF HYDROFLUORIC ACID EXPOSURE.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical attention.

Skin Contact: Remove immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Get immediate medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Drink large quantities of water first, then Milk or Milk of Magnesia. Never give anything by mouth to an unconscious person. Get immediate medical attention.

4.2 Most Important Symptoms/Effects, both Acute and Delayed:

Eye Contact: Liquid causes severe permanent eye damage.

Skin Contact: Liquid may cause severe skin burns which may not be immediately painful or visible, and may penetrate skin and damage underlying tissue.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed: Specialized medical treatment required for all exposures. Seek immediate medical attention and communicate clearly to the competent doctor or authority the type and level of Hydrofluoric Acid exposure. See First Aid Reference in Section 16.

5. Fire-fighting Measures

5.1 Suitable Extinguishing Media:

Suitable Extinguishing Media: Use water or Carbon Dioxide "CO_2" for fires in area.

Unsuitable Extinguishing Media: Do not use high pressure water jet or water stream.

5.2 Specific Hazards Arising from the Substance or Mixture: Hydrogen gas may be generated when acid comes in contact with metal. At decomposition, emits highly corrosive fluoride fumes.

5.3 Special Protective Action for Fire-fighters: Use appropriate Personal Protective Equipment when fighting chemical fires. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Additional Information: Use water spray to cool nearby containers exposed to fire.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Cordon off spill area. Wear protective clothing, gloves, apron, boots, hat, and closed safety glasses or chemical splash goggles. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components. Remove immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

6.2 Environmental Precautions: Avoid release to the environment. Dispose of contents/container to hazardous or special waste collection point and in accordance to applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up: Neutralize spills with soda ash or lime slurry. Collect and dispose slurry waste to hazardous or special waste collection point and in accordance to applicable regulations. Never neutralize with a strong alkali material.

7. Handling and Storage

7.1 Precautions for Safe Handling: Do not loosen or remove primary white bottle cap. Remove only red cap to expose dispenser tip. Keep out of reach of children. Do not breathe vapors. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

7.2 Conditions for Safe Storage, Including any Incompatibles:

Storage Class: Acids.

Keep only in original container. Safely lock container in a cool and well ventilated place. Keep container sealed when not in use.

Packaging Material: Plastic. Do not reuse.

Unsuitable Packaging Material: Any glass or metal container. Keep only in original container.

8. Exposure Controls / Personal Protection

8.1 Control Parameters:

Exposure Limits Values

Name	Air Concentration USA ACGIH TLV (ppm)	Air Concentration USA OSHA TWA (mg/m^3)
Hydrofluoric Acid as Fluorides "F"	3	-
Ammonium Bifluoride as Fluorides "F"	-	2.5

8.2 Exposure Controls:

Engineering Measures: Work in a well ventilated area or under a ventilation hood.

8.3 Individual Protection Measures, such as Personal Protective Equipment:

Ensure all equipment (including Personal Protective Equipment) is compatible with all product components.

Eye Protection: Wear closed safety glasses or chemical splash goggles.

Skin Protection: Wear protective clothing and protective apron.

Respiratory Protection: Above OELV of "F" wear mask approved for Hydrogen Fluoride.

Hand Protection: Wear protective gloves. Gloves must be inspected prior to use. Replace if worn or damaged. Do not reuse.

Hygiene Measures: Wash thoroughly after handling. Do not smoke, eat or drink in work area.

9. Physical and Chemical Properties

Appearance: Clear Liquid.

Odor: Sharp Odor.

Odor Threshold: Not Determined.

pH: ≤ 1.0

Melting Point/Freezing Point (°C): Not Applicable.

Initial Boiling Point/Boiling Point Range (°C): Not Applicable.

Flash Point (°C): Not Applicable.

Evaporation Rate: Not Determined.

Flammability (solid, gas): Not Applicable.

Upper/Lower Flammability or Explosive Limits: Not Applicable.

Vapor Pressure: Not Determined.

Vapor Density: Not Determined.

Relative Density (Water = 1): 1.1 at 20°C.

Solubility: Highly soluble in water.

Partition Coefficient: n-Octanol/Water: Not Applicable.

Auto-ignition Temperature: Not Applicable.

Viscosity: Not Determined.

Explosive Properties: Not Applicable.

Oxidizing Properties: Not Applicable.

10. Stability and Reactivity

10.1 Reactivity: Reaction with metals can potentially release dangerous hydrogen gas.

10.2 Chemical Stability: Stable if used according to specifications.

10.3 Possibility of Hazardous Reactions: Strong alkalis, metals.

10.4 Conditions to Avoid: Avoid contact with strong alkalis, metals and high temperatures.

10.5 Incompatible Materials: Strong alkalis, metals, glass.

10.6 Hazardous Decomposition Products: Decomposition emits highly corrosive fluoride fumes.

11. Toxicological Information

Acute Toxicity: Data not available for mixture.

Toxicological Information on Ingredients:		**Acute Toxicity**		
Name	CAS No.	Oral LD50 (Rat - mg/Kg)	Inhalation LC50 (Rat – ppm)	Dermal LD50 (Rabbit – mg/Kg)
Hydrofluoric Acid as Fluorides "F"	7664-39-3	-	5100 ppm / 5minutes 1300 ppm/60minutes	2% HF solution corrosive to rabbit skin with 1 hour exposure, but not with 1 minute exposure
Ammonium Fluoride*	1341-49-7	32	-	-
*LD_{50} (Intraperitoneal -Rat)				

Skin Corrosion/Irritation: May cause severe skin burns which may not be immediately painful or visible and may penetrate skin and damage underlying tissue.

Serious Eye Damage/Eye Irritation: Causes severe permanent eye damage.

Respiratory or Skin Sensitization: No Information Available.

Germ Cell Mutagenicity: No Information available.

Carcinogenicity: Hydrofluoric Acid: not listed by NTP, IARC, OSHA, or ACGIH as a carcinogen.
Fluorides as "F": unclassifiable as carcinogenicity to humans (IARC-3).

Reproductive Toxicity: No Information available.

Specific Target Organ Toxicity – Single Exposure: No Data Available

Specific Target Organ Toxicity – Repeated Exposure: No Data Available

Aspiration Hazard: No Data Available

Inhalation: Inhalation of "F" vapors of 2 mg/m^3 or more may cause damage to lungs, respiratory system and pulmonary edema.

Subchronic/Chronic Toxicity: Based on Hydrofluoric Acid supplier: "Prolonged exposure can cause bone and joint changes in humans (Fluorosis – increased bone density and mottling of teeth)."

12. Ecological Information

12.1 Ecotoxicity:

Aquatic Toxicity: Based on Hydrofluoric Acid supplier: "60 ppm/*/fish/lethal/fresh water. (*Time period not specified)".

12.2 Persistence and Degradability: Not applicable to inorganic substances or materials.

12.3 Bioaccumulative Potential: There is no evidence to suggest bioaccumulation will occur.

12.4 Mobility in Soil: Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

12.5 Results of PBT and vPvB Assessment: This product does not contain PBT or vPvB substances.

12.6 Other Adverse Effects: No data available.

13. Disposal Considerations

13.1 Disposal Methods:

Product (Any Residual Waste/Unused Product): Dispose of any residual product waste or unused product to hazardous or special waste collection point and in accordance to applicable regulations. Avoid release to the environment.

Packaging (White Plastic): After use, close empty bottle, and dispose of to hazardous or special waste collection point and in accordance to applicable regulations.

14. Transport Information

14.1 UN-Number: UN1790

14.2 UN Proper Shipping Name: Hydrofluoric Acid Solution

14.3 Transport hazard class(es): 8 (6.1)

14.4 Packing group: PG II

14.5 Environmental Hazard(s): Marine Pollutant: No

14.6 Special Precaution to User: See section 7.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

15. Regulatory Information

15.1 Safety Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

U.S. Regulations:
Inventory Status: All components are on TSCA.
U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:
SARA (311/312) Hazard Categories: Acute/Chronic.
SARA 313: This product contains the following SARA 313 Toxic Release Chemicals.

Chemical Name	CAS Number	Concentration
Hydrofluoric Acid	7664-39-3	5% ≤ C ≤ 12%
Ammonium Bifluoride	1341-49-7	8% ≤ C ≤ 16%

16. Further Information

First Aid Reference: Honeywell HF Medical Book - Recommended Medical Treatment for Hydrofluoric Acid Exposure (Most Recent Edition).

Abbreviations and Acronyms:
ACGIH = American Conference of Governmental Industrial Hygienists.
C = Concentration (weight percent).
DOT = Department of Transportation (United States).
IMDG = International Maritime Dangerous Goods Code.
IARC = International Agency for Research on Cancer.
OSHA = Occupational Safety & Health Administration.
PBT = Persistent, Bioaccumulative and Toxic Substances.
ppm = parts per million.
OELV = Occupational Exposure Limits Values.
TLV = Threshold Limit Values.
TSCA = Toxic Substance Control Act.
TWA = Time-Weighted Average.
vPvB = very Persistent and very Bioaccumulative Substances.

The information contained herein is accurate to the best of our knowledge. A. L. Wilson Chemical Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

Initial Preparation Date: *10/09/1990*
Last Revision Date: *9/16/2003*
Effective Date: *8/1/2005*

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: PEAK ANTIFREEZE & COOLANT

1. CHEMICAL PRODUCT & COMPANY INFORMATION

OLD WORLD INDUSTRIES, INC.
4065 COMMERCIAL AVENUE
NORTHBROOK, ILLINOIS 60062
PHONE: 847-559-2000
EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	*CAS#*	*% by Wt*	*PEL (OSHA)*	*TLV (ACGIH)*
Ethylene Glycol	107-21-1	90 - 95	50 ppm	50 ppm
Diethylene Glycol	111-46-6	0 - 5	None	None
Dipotassium Phosphate	7758-11-4	1 - 2	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Slight odor.	***May be fatal if swallowed.***	***Vapors can cause eye irritation.***

Lowest Known LD50 (Oral)	107-21-1	5840 mg/kg (Rats)
Lowest Known LD50 (Skin)	107-21-1	9530 mg/kg (Rabbits)

HAZARD RATING SYSTEM

NFPA: HEALTH: 1	**FLAMMABILITY: 1**	**REACTIVITY: 0**
HMIS: HEALTH: 2	**FLAMMABILITY: 1**	**REACTIVITY: 0**

KEY: 0 – Minimal 1 – Slight 2 - Moderate 3 - Serious 4 - Severe

POTENTIAL HEALTH EFFECTS

Routes of Exposure: Inhalation, Ingestion, Skin Contact/Absorption, Eye Contact

Eye: May cause slight transient (temporary) eye irritation. Corneal injury is unlikely. Vapors or mists may cause eye irritation.

Skin: Prolonged or repeated exposure not likely to cause significant skin irritation. A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Repeated skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potential lethal amounts.

Ingestion: Single dose oral toxicity is considered to be moderate. Excessive exposure may cause central nervous system effects, cardiopulmonary effects (metabolic acidosis), and kidney failure. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing amounts larger than that may cause serious injury, even death.

Inhalation: At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause adverse effects.

Systemic (Other Target Organ) Effects: Repeated excessive exposures may cause severe kidney and also liver and gastrointestinal effects. Signs and symptoms of excessive exposure may be central nervous system effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects. Observations in animals include formation of bladder stones after repeated oral doses of ethylene glycol. Reports of kidney failure and death in burn patients suggest the ethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function.

Cancer Information: Based on data from long-term animal studies, ethylene glycol is not believed to pose a carcinogenic risk to man.

Teratology (Birth Defects): Exposure to ethylene glycol has caused birth defects in laboratory animals only at doses toxic to the mother.

Reproductive Effects: Ethylene glycol has not interfered with reproduction in animal studies except at very high doses.

CHRONIC, PROLONGED OR REPEATED OVEREXPOSURE

Effects of Repeated Overexposure: Repeated inhalation of ethylene glycol mist may produce signs of central nervous system involvement, particularly dizziness and nystagmus.

Other Effects of Overexposure: repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material.

4. FIRST AID MEASURES
Ensure physician has access to this MSDS.

TREATMENT

Eyes: Immediately flush eyes with large amounts of water for 15 minutes, lifting lower and upper lids. Get medical attention as soon as possible. Contact lenses should never be worn when working with this chemical.

Skin: Flush area of skin contact immediately with large amounts of water for at least 15 minutes while removing contaminated clothing. If irritation persists after flushing, get medical attention promptly. Wash clothing before re-use.

Inhalation: If inhaled, immediately remove victim to fresh air and call ***emergency medical care.*** If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: Obtain medical attention immediately. If patient is fully conscious, give two glasses of water. Do not induce vomiting. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whisky. For children, give proportionally less liquor, according to weight.

Notes to Physician:
It is estimated that the lethal oral dose to adults is of the order of 1.0 ml/kg. Ethylene glycol is metabolized by alcohol dehydrogenate to various metabolites including glyceraldehydes, glycolic acid and oxalic acid which cause an elevated anion-gap metabolic acidosis and renal tubular injury. The signs and symptoms in ethylene glycol poisoning are those of metabolic acidosis, CNS depression, and kidney injury. Urinalysis may show albuminuria, hematuria and oxaluria. Clinical chemistry may reveal anion-gap metabolic acidosis and uremia. The currently recommended medical management of ethylene glycol poisoning includes elimination of ethylene glycol and metabolites, correction of metabolic acidosis and prevention of kidney injury. It is essential to have immediate and follow up urinalysis and clinical chemistry. There should be particular emphasis on acid-base balance and renal function tests. A continuous infusion of 5% sodium bicarbonate with frequent monitoring of electrolytes and fluid balance is used to achieve correction of metabolic acidosis and forced diuresis. As a competitive substrate for alcohol dehydrogenase, ethanol is antidotal. Given in the early stages of intoxication, it blocks the formulation of nephrotoxic metabolites. A therapeutically effective blood concentration of ethanol is in the range 100-150 mg/dl, and should be achieved by a rapid loading dose and maintained by intravenous infusion. For severe and/or deteriorating cases, hemodialysis may be required. Dialysis should be considered for patients who are symptomatic, have severe metabolic acidosis, a blood ethylene glycol concentration greater than 25 md/dl, or compromise of renal functions.

A more effective intravenous antidote for physician use is 4-methylpyrazole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred. A generally recommended protocol is a loading dose of 15 mg/kg followed by 10 mg/kg every 12 hours for 4 doses and then 15 mg/kg every 12 hours until ethylene glycol concentrations are below 20 mg/100 ml. Slow intravenous infusion is required. Since 4-methyplyrozole is dialyzable, increased dosage may be necessary during hemodialysis. Additional therapeutic measures may include the administration of cofactors involved in the metabolism of ethylene glycol. Thiamine (100 mg) and pyridoxine (50 mg) should be given every six hours.

Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. The mechanism of production has not been elucidated, but it appears to be non-cardiogenic in origin in several cases. Respiratory support with mechanical ventilation and positive end expiratory pressure may be required. There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphasia.

5. FIRE FIGHTING MEASURES

Flammable Properties
Flash Point: 119°C (247°F)
Method Used: Setaflash
Autoignition Temperature: Autoignition temperature for ethylene glycol is 398°C (748°F).

Flammability Limits - % of vapor concentration at which product can ignite in presence of spark.
Lower Flammability Limit: 3.2%
Upper Flammability Limit: 15.3%

Hazardous Combustion Products: Hazardous combustion products may include and are not limited to carbon monoxide, carbon dioxide and trace amounts of aldehydes and organic acids. When available oxygen is limited, as in a fire or when heated to very high temperatures by a hot wire or plate, carbon monoxide and other hazardous compounds such as aldehydes might be generated.

Extinguishing Media: Water fog or fine spray. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Carbon dioxide. Dry chemical. Do not use direct water stream. May spread fire.

Fire Fighting Instructions: No fire and explosion hazards expected under normal storage and handling conditions (i.e. ambient temperatures). However, ethylene glycol or solutions of ethylene glycol and water can form flammable vapors with air if heated sufficiently. Keep people away. Isolate fire area and deny unnecessary entry.

Protective Equipment for Fire Fighters: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

6. ACCIDENTAL RELEASE MEASURES

Protect People: Material is moderately toxic when ingested. Take adequate precautions to keep people, especially children away from spill site. PVC-coated rubber gloves and monogoggles or face shield can be used during cleanup of spill site. Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children. Product may become a solid at temperatures below -18°C (0°F). Do not store near food, foodstuffs, drugs or potable water supplies.

Protect the Environment: Do not dump used product or diluted material into sewers, on the ground, or into any body of water.

Cleanup: Small spills: Soak up with absorbent material. Large spills: Dike and pump into suitable containers for disposal. Ensure compliance with all applicable statues that require notification of appropriate government officials.

7. HANDLING AND STORAGE

Steps to be Taken in Case Material is Released or Spilled: Eliminate all sources of ignition in vicinity of the spilled or released fluid.

Other Precautions: Use normal precautions in handling any combustible liquid. Keep container closed when not in use. Store away from heat or open flame. Product on surfaces can cause slippery conditions. Practice reasonable care and cleanliness. Avoid breathing spray mists if generated. Keep out of reach of children. Product may become a solid at temperatures below -18°C (0°F). Do not store near food, foodstuffs, drugs or potable water supplies.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Respiratory protection is required if airborne concentration exceeds TLV. At any detectable concentration any self-contained breathing apparatus with a full face piece and operated in a pressure-demand or other positive pressure mode or any supplied-air respirator with a full face piece and operated in a pressure-demand or other positive pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode.

Escape: Any air-purifying full face piece respirator (gas mask) with a chin-style or front- or back-mounted organic vapor canister or any appropriate escape-type self-contained breathing apparatus.

Skin Protection: Protective gloves recommended when prolonged skin contact cannot be avoided. Polyethylene; Neoprene; Nitrile; Polyvinyl alcohol; Natural Rubber, Butyl Rubber. Safety shower should be available.

Eye Protection: Safety goggles and face shield. Emergency eyewash should be available. Contact lenses should not be worn when working with this chemical.

Engineering Controls: Use general or local exhaust ventilation to meet TLV requirements.

EXPOSURE LIMITS

Component	Exposure Limits	Skin Form
Ethylene glycol	100 mg/m3 CEILING ACGIH	Aerosol
Ethylene glycol	125 mg/m3 CEILING OSHA-vacated	
	50 ppm CEILING OSHA – vacated	
	100 mg/m3 CEILING UCC	Aerosol and Vapor
Diethylene glycol	50 ppm TWA8 AIHA WEEL	Aerosol and Vapor
Diethylene glycol	10 mg/m3 TWA8 AIHA WEEL	Aerosol

In the Exposure Limits Chart above, if there is no specific qualifier (i.e., Aerosol) listed in the Form Column for a particular limit, the listed limit includes all airborne forms of the substance that can be inhaled.

A "blank" in the Skin column indicates that exposure by the cutaneous (skin) route is not a potential significant contributor to overall exposure.

9. PHYSICAL / CHEMICAL PROPERTIES

Boiling Range:	171 - 175°C (339 - 348°F)
Freeze Point:	-18°C (0°F)
Specific Gravity (Water =1):	1.12
Pounds/Gallons: 9.3	
Vapor Pressure (mm of Hg) @ 20C:	<0.1
Vapor Density (air=1):	2.1
Water Solubility:	Complete
Evaporation Rate (BuAc = 1):	Nil
% Volatile By Volume:	97.0
Appearance:	Green
Odor:	Mild
pH (50% Water Solution):	10.5-11.0

10. STABILITY & REACTIVITY DATA

Stability:	Stable
Conditions to Avoid:	Keep away from flame
Incompatibility (Materials to Avoid):	Strong acid or oxidizing agents
Hazardous Decomposition Products:	Incomplete combustion may produce CO gas
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

Skin: The dermal LD50 has not been determined.

Ingestion: The lethal dose in humans is estimated to be 100 ml (3 ozs.). The oral LD50 for rats is in the 6000-13,000-mg/kg range.

Mutagenicity (The Effects on Genetic Material): In vitro mutagenicity studies were negative. Animal mutagenicity studies were negative.

Significant Data with Possible Relevance to Humans: Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. The no-effect doses for developmental toxicity for ethylene glycol given by gavage over the period of organogenesis has been shown to be 150 mg/kg/day for the mouse and 500 mg/kg/day for the rat. Also, in a preliminary study to asses the effects of exposure of pregnant rats and made to aerosis at concentrations of 150, 1000 and 25000 mg/m3 for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentration, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol percutaneous absorption of ethylene glycol from contaminated skin, or swallowing ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1000 and 25000 mg/m3) and developmental toxicity with minimal evidence of teratogenicity (2500 mg/m3). The no-effects concentration (based on maternal toxicity) was 500 mg/m3. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen. There is currently no available information to suggest that ethylene glycol has caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental

toxicity. Exposure to high aerosol concentrations is only minimally effective in producing developmental toxicity. The major route for producing developmental toxicity is perorally. Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous in vitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

A chronic dietary feeding study of diethylene glycol with rats showed mild kidney injury at 1%, while concentrations of 2% and 4% caused more marked kidney injury. In addition, at 2% and 4% of diethylene glycol in the diet, some rats developed benign papillary tumors in the urinary bladder. These have been attributed to the presence of urinary bladder calcium oxalate stones. No evidence for carcinogenicity was found with a chronic skin-painting study with diethylene glycol in mice. The absence of a direct chemical carcinogenic effect addords with the results in vitro genotoxicity studies that show that it does not produce mutagenic or clastogenic effects. A feeding study employing up to 5.0% diethylene glycol in the diet failed to produce any teratogenic effects. In a mouse continuous breeding study with large doses of diethylene glycol in drinking water, there was evidence for reproductive toxicity at 3.5% (equivalent to 6.1 g/kg/day) as reduced number of litter, live pups per litter and live pup weight. No such effects were seen at 1.75% (approximately 3.05 g/kg/day). The relevance of these very high dosages to human health is uncertain. Pregnant rats receiving undiluted diethylene glycol by gavage over the period of organogenesis had toxic effects at 4.0 and 8.0 ml/kg/day as mortality, decreased body weight, decreased food consumption increased water consumption and increased liver and kidney weights. Fetotoxicity was seen only at these maternally toxic dosages. Decreased fetal body weight occurred at 8.0 ml/kg/day, and increased skeletal variants at 4.0 and 8.0 ml/kg/day. No embryotixic or teratogenic effects were seen. Neither maternal toxicity nor fetotoxicity occurred at 1.0 ml/kg/day. In a study with mice also receiving undiluted diethylene glycol over the period of organogenesis, maternal toxicity occurred at 2.5 and 10.0 ml/kg/day, but not at 0.5 ml/kg/day. Definitive developmental toxicity was not seen in this species.

ACUTE TOXICITY

Peroral: The lethal dose in humans is estimated to be 3 oz. or 100 ml.
Rat: LD50 (6000 – 13000) mg/kg

Percutaneous:
Rabbit: LD50 = >22270 mg/kg; 24 h occluded

Inhalation:
Rat: 8-hour exposure, substantially saturated vapor studies, dynamic generation method

Mortality: 0/6

Inhalation: Mist/vapor study, rat, at 170°C, 8-hour exposure = 2.2 mg/l

Mortality: 0/6

Inhalation:
Rat: 8-hour exposure, fog = 10000 ppm; 65° - 70°C

Mortality: 0/6

IRRITATION

Skin:

Rabbit: 24-hour occluded contact, 0.5 ml
Results: Minor erythema and edema

Skin:

Human: Primary irritation patch test, 48-hour occluded, 0.2 ml
Results: Evidence of irritation

Eye:

Rabbit: 0.1 ml
Results: Minor transient iritis, conjunctival irritation with discharge

REPEATED EXPOSURE

In a 7-day dietary study with rats, a significant increase in kidney weights in females was observed at 5.0 gm/kg. The NOEL was 2.5 gm/kg.

In a 24-month dietary study with rats, increased mortality in males was observed at the highest dose, 1.0 gm/kg/day. There were multiple signs: mineralization of several organs, including the cardiac vessels, cardiac muscle, vas deferens, stomach and pulmonary vessels; cellular hyperplasia of the parathyroids, hemosiderosis of the spleen, myocardial fibrosis, portal fibrosis of the liver, bile duct hyperplasia and hydronephrosis and oxylate nephrosis of the kidneys. Ethylene glycol was not oncogenic.

In a 90-day dietary study with dogs, repeated exposures to 2.5 gm/kg resulted in acute renal failure and deaths. The NOAEL was 1.0 gm/kg.

SENSITIZATION (ANIMAL AND HUMAN STUDIES)

Repeated skin contact with ethylene glycol may, in a very small proportion of cases, cause sensitization with the development of allergic contact dermatitis. The incidence is significantly less than 1% with the undiluted material.

REPRODUCTIVE TOXICITY

A three-generation study indicated that ethylene glycol did not affect reproductive parameters at dietary concentrations up to 1.0 gm/kg/day in any generation.

CHRONIC TOXICITY AND CARCINOGENICITY

Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of a carcinogenic potential for ethylene glycol has been supported by numerous in vitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

GENETIC TOXICOLOGY

In Vitro: Ethylene glycol was devoid of genotoxic activity in an Ames test, forward gene mutation and sister chromatid exchange (SCE) studies in Chinese Hamster Ovary (CHO) cells and an in vitro cytogenetics study.

In Vivo: Ethylene glycol by three different routes (intravenous, peroral and percutaneous) demonstrates apparent first-order pharmacokinetic behavior for the disposition in and the elimination from the plasma. Dose-dependent changes occur for the elimination of metabolites in the urine and as $14CO^2$ after single doses for the intravenous and peroral, but not the percutaneous route. The hypothesis from literature sources exists that developmental toxicity is caused by a metabolite of ethylene glycol, called glycolic acid, and not parent ethylene glycol. Under most conditions of ethylene glycol exposure, the glycolic acid metabolite is present in the blood in very low levels. However, it can become the major metabolite following large doses of ethylene glycol due to saturation of glycolic acid oxidation and/or elimination. When levels of this acidic metabolite exceed the capacity of maternal blood buffers to neutralize it, a maternal metabolic acidosis ensues, which has been hypothesized to be the true agent responsible for ethylene glycol induced developmental toxicity. Research suggests that ethylene glycol developmental toxicity is due to a dose-rate dependent toxicokinetic shift leading to glycolate accumulation and metabolic acidosis.

ADDITIONAL STUDIES

Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. The no-effect doses for developmental toxicity for ethylene glycol given by gavage over the period of organogenesis has been shown to be 150 mg/kg/day for the mouse and 500 mg/kg/day for the rat. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations of 150, 1000 and 2500 mg/m^3 for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentration, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1000 and 2500 mg/m^3) and developmental toxicity with minimal evidence of teratogenicity (2500 mg/m^3). The no-effects concentration (based on maternal toxicity) was 500 mg/m^3. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen. There is currently no available information to suggest that ethylene glycol has caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity. Exposure to high aerosol concentrations is only minimally effective in producing developmental toxicity.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE

Movement & Partitioning: Bioconcentration potential is low (BCF less than 100 or Log Kow less than 3). Log octanol/water partition coefficient (log Kow) is -1.36. Henry's Law Constant (H) is 6.0E-08 atm-m3/mol. Bioconcentration factor (BCF) is 10 in golden orfe.

Degradation & Transformation: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). 5-Day biochemical oxygen demand (BOD5) is 0.78 p/p. 10-Day biochemical oxygen demand (BOD10) is 1.06 p/p. 20-Day biochemical oxygen demand (BOD20) is 1.15 p/p. Theoretical oxygen demand (THOD) is calculated to be 1.29 p/p. Biodegradation may occur under both aerobic and anaerobic conditions (in either the presence or absence of oxygen). Inhibitory concentration (IC50) in OECD "Activated Sludge, Respiration Inhibition Test" (Guideline # 209) is < 1000 mg/L. Degradation is expected in the atmospheric environment within days to weeks.

Ecotoxicology: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species). Acute LC50 for fathead minnow (Pimephales promelas) is 51000 mg/L. Acute LC50 for bluegill (Lepomis macrochirus) is 27549 mg/L. Acute LC50 for rainbow trout (Oncorhynchus mykiss) is about 18000-46000 mg/L. Acute LC50 for guppy (Poecilia reticulata) is 49300 mg/L. Acute LC50 for water flea (Daphnia magna) is 46300-51100 mg/L. Acute LC50 for the cladoceran Ceriodaphnia dubia is 10000-25800 mg/L. Acute LC50 for crayfish is 91430 mg/L. Acute LC50 for brine shrimp (Artemia salina) is 20000 mg/L. Acute LC50 for golden orfe (Leuciscus idus) is greater than 10000 mg/L. Acute LC50 for goldfish (Carassius auratus) is greater than 5000 mg/L. Growth inhibition EC50 for green alga Selenastrum capricornutum is 9500-13000 mg/L.

BOD (% Oxygen Consumption):

Day 5	Day 10	Day 15	Day 20	Day 30
51%	80%		97%	

ECOTOXICITY

Toxicity to Micro-organisms:
Bacterial / NA: 16 h; IC50
Result Value: >10000 mg/l

Toxicity to Aquatic Invertebrates:
Daphnia: 48 h; LC50
Result Value: >100000 mg/l

Toxicity to Fish
Fathead Minnow: 94 h; LC50
Result Value: 70000 mg/l

FURTHER INFORMATION

Chemical Oxygen Demand (COD) – Measured: 1.29 mg/mg
Theoretical Oxygen Demand (THOD) – Calculated: 1.30 mg/mg

Octanol/Water Partition Coefficient – Measured: -1.36

13. DISPOSAL CONSIDERATIONS

DO NOT discharge to sewer. Wear appropriate personal protection. Take up with sand, vermiculite, or similar inert material. Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
Non-Bulk
Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package)

Bulk

Proper Shipping Name:	Environmentally Hazardous Substance, LIQUID N.O.S. (ETHYLENE GLYCOL)
Technical Name:	ETHYLENE GLYCOL
ID Number:	UN 3082
Hazard Class:	9
Packing Group:	PG III
Reportable Quantity:	5,000 lb.

IATA
Non-Bulk
Not Regulated by IATA

IMDG
Non-Bulk
Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

15. REGULATORY INFORMATION

THIS PRODUCT CONTAINS COMPONENT(S) CITED ON THE FOLLOWING REGULATIONS.

	Chemical Name	*Cas Number*
	Ethylene Glycol	107-21-1

United States - TSCA Inventory: Listed

Water Standards: No data available

Atmospheric Standards: Clean Air Act (1990) - List of Hazardous Air Contaminants: listed

CERCLA: Reportable Quantity (RQ): 5,000 pounds (532 gallons)

OSHA Hazard Communication Standard: This product is a "hazardous chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III:

Section 311/312 - Categories: Acute hazard; chronic hazard

Section 312 - Inventory Reporting: Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.

Section 313 - Emission Reporting: Ethylene glycol is subject to Form R reporting requirements.

Section 302 - Extremely Hazardous Substances: Ethylene glycol is not listed.

State Right-To-Know:

California - Exposure Limits - Ceilings:	vapor-50 ppm ceiling; 125 mg/m3 ceiling
Director's List of Hazardous Substances:	listed
Florida - Hazardous Substances List:	listed
Massachusetts - Right-to-Know List:	listed
Minnesota - Haz. Subs. List:	listed (particulate and vapor)
New Jersey - Right-to-Know List (Total):	Present greater than 1.0%
Pennsylvania Right-to-Know List:	environmental hazard

Canadian Regulations: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required.

WHMIS Information: D2A - material has potential toxic effects. Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): The normal consumer use of this product does not result in exposure to chemicals known to the state of California to cause Cancer and/or reproductive harm above the significant risk level for carcinogens or the maximum allowable dose levels for reproductive toxins. Warnings are not required for consumer packaging. However, industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

California SCAQMD Rule 443.1 (South Coast Air Quality Management District Rule 443.1, Labeling of Materials Containing Organic Solvents):

VOC: Vapor pressure 0.06 mmHg at 20°C
1113.38 g/l

16. OTHER INFORMATION

Contact: Thomas Cholke Phone: (847) 559-2225

Old World Industries, Inc. makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, Inc. as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, Inc. assume liability arising out of the use by others of this product referred to herein. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

SAFETY DATA SHEET

Sewing Machine Oil Light

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Sewing Machine Oil Light **WHMIS:** Not a Controlled Product

SUPPLIER: Commercial Oil Company
P (905) 560-3244
F (905) 560-2961
35 Burford Road
Hamilton, Ontario
L8E 3C6

Product and SDS Information: 1-800-463-1976

SECTION 2. HAZARDS IDENTIFICATION

INHALATION: Negligible hazard at normal temperatures (up to 38 deg C). Elevated temperatures or mechanical action may form vapours, mists or fumes, which may be irritating to the eyes, nose, throat and lungs. Avoid breathing vapours or mists.
EYE CONTACT: Slightly irritating but will not injure eye tissue.
SKIN CONTACT: Low Toxicity.
Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).
INGESTION: Low Toxicity
OCCUPATIONAL EXPOSURE LIMITS: For oil mists, 5 mg/m3 recommended based on the ACGIH TLV

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

A mixture of base oils and additives.

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act: **No regulated components**

SECTION 4. FIRST AID MEASURES

INHALATION: Vapour pressure of this material is low and as such inhalation under normal conditions is usually not a
problem. If over exposed to oil mist, remove from further exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.
EYE CONTACT: Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.
SKIN CONTACT: Flush with large amounts of water. Use soap if it is available. Remove severely contaminated clothing (including shoes) and launder before reuse. If irritation persists, seek medical attention.
INGESTION: If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention

SECTION 5. FIRE-FIGHTING MEASURES

Flashpoint and method: 169 deg C COC D92
Auto ignition : NA **Flammable Limits:** LEL NA **UEL:** NA
GENERAL HAZARDS: Low hazard; liquids may burn upon heating to temperatures at or above the flash point. Decomposes; flammable/toxic gases will form at elevated temperatures (thermal decomposition). Toxic gases will form upon combustion. Empty product containers may contain product residue. Do not pressurize, cut, heat, weld, or expose containers to flame or other sources of ignition.
FIRE FIGHTING: Use water spray to cool fire-exposed surfaces and to protect personnel. Shut off fuel to fire. Use foam, dry chemical or water spray to extinguish fire. Respiratory and eye protection required for fire fighting

personnel. Avoid spraying water directly into storage containers due to danger of boil over. A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.
HAZARDOUS COMBUSTIBLE PRODUCTS: Smoke, carbon monoxide and dioxide and traces of oxides of sulphur.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate Provincial and Federal authorities. In particular, immediate reporting is required for all spills that could reach any waterway, including wetlands and intermittent dry creeks.

LAND SPILL: Eliminate source of ignition. Keep public away. Prevent additional discharge of material; if possible do
so without hazard. Prevent spills from entering sewer watercourses or low areas. Contain spilled liquid with sand or earth. Recover by pumping or using a suitable absorbent. Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse affects of the spill.
WATER SPILL: Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters. Consult an expert on
disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately. Take all action necessary to prevent and
remedy the adverse affects of the spill.

PERSONAL PRECAUTIONS: See Section 8

SECTION 7. HANDLING AND STORAGE

HANDLING STORAGE AND SHIPPING: Keep containers closed. Handle and open containers with care. Store in a cool, well-ventilated place away from incompatible materials. Do not handle or store near an open flame, sources of heat, or sources of ignition.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTION: The selection of personal protective equipment varies depending upon conditions of use. Where prolonged and/or repeated skin and eye contact is likely to occur, wear safety glasses with side shields, long sleeves, and chemical resistant gloves. Where eye contact is unlikely, but may occur as a result of short and/or periodic exposures, wear safety glasses with side shields. Where concentrations in air may exceed the occupational exposure limits given in Section 4 and where engineering work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.
EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, an exposure limit of 5.00 mg/m3 is suggested for oil mist.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Viscosity: 22.1 cSt at 40°C
Density, kg/m3: 866 @ 15°C
<.1-2
Evaporation Rate: <.1-2
Pour Point: -30°C
Appearance: Clear, pale amber liquid (ASTM)

SECTION 10. STABILITY AND REACTIVITY

STABILITY: This product is stable. Hazardous polymerization will not occur.
INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION: Fumes, smoke, carbon monoxide, sulphur oxides if incomplete combustion.

SECTION 11. TOXICOLOGICAL DATA

ORAL TOXICITY
Low Toxicity
DERMAL TOXICITY
Low Toxicity
Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).
INHALATION TOXICITY
Negligible hazard at normal temperatures (up to 38 deg C). Elevated temperatures or mechanical action may form vapours, mists or fumes, which may be irritating to the eyes, nose, throat and lungs. Avoid breathing vapours or mists.
EYE IRRITATION
Slightly irritating but will not injure eye tissue
SKIN IRRITATION
Practically non-irritating. (Primary Irritation index: greater than 0.5 but less than 3). Based on testing of similar products and/or the components.

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: Not established.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: The product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

SECTION 14. TRANSPORT INFORMATION

PRODUCT LABEL ... Sewing Machine Oil Light
SHIPPING NAME.....Not Regulated by DOT

SECTION 15. REGULATORY INFORMATION

No information available.

SECTION 16. PREPARATION

USE: Lubricant

COMMERCIAL OIL COMPANY
Hamilton, Ontario

Date: Feb. 18, 2016
Prepared by: Operations

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of Commercial Oil Company's knowledge; however, the Commercial Oil Company makes no warranty whatsoever, expressed or implied, and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.

Safety Data Sheet
California CARB Compliant



1 - Identification

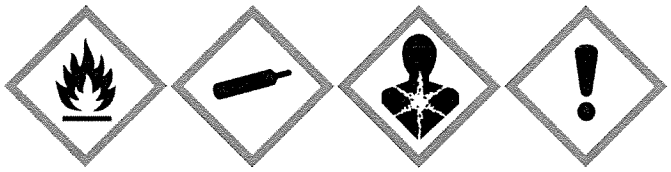
Product Name: WD-40 Multi-Use Product Aerosol **Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion** **Restrictions on Use: None identified** **SDS Date Of Preparation: March 5, 2019**	**Manufacturer: WD-40 Company** **Address: 9715 Businesspark Avenue San Diego, California, USA 92131** **Telephone:** **Emergency: 1-888-324-7596** **Information: 1-888-324-7596** **Chemical Spills: 1-800-424-9300 (Chemtrec)** **1-703-527-3887 (International Calls)**

2 – Hazards Identification

Hazcom 2012/GHS Classification:
Flammable Aerosol Category 1
Gas Under Pressure: Compressed Gas
Aspiration Toxicity Category 1
Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Label Elements:



DANGER!
Extremely Flammable Aerosol.
Contains gas under pressure; may explode if heated.
May be fatal if swallowed and enters airways.
May cause drowsiness or dizziness.

Prevention
Keep away from heat, sparks, open flames, hot surfaces. – No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Avoid breathing vapors or mists.
Use only outdoors or in a well-ventilated area.

Response
IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

Storage
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.

Disposal
Dispose of contents and container in accordance with local and national regulations.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	US Hazcom 2012/ GHS Classification
LVP Aliphatic Hydrocarbon	64742-47-8	45-50%	Aspiration Toxicity Category 1
Petroleum Base Oil	64742-56-9 64742-65-0 64742-53-6 64742-54-7 64742-71-8	<35%	Not Hazardous
Aliphatic Hydrocarbon	64742-47-8	<25%	Flammable Liquid Category 3 Aspiration Toxicity Category 1 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Carbon Dioxide	124-38-9	2-3%	Simple Asphyxiant Gas Under Pressure, Compressed Gas

Note: The specific chemical identity and exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.
Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists.
Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.
Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.
Signs and Symptoms of Exposure: Harmful or fatal if swallowed. Aspiration of liquid into the lungs during swallowing or vomiting may cause lung damage. May cause eye and respiratory irritation. Inhalation of mists or vapors may cause drowsiness, dizziness and other nervous system effects. Skin contact may cause drying of the skin.
Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is needed for ingestion.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.
Specific Hazards Arising from the Chemical: Extremely flammable aerosol. Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. Combustion will produce oxides of carbon and hydrocarbons.
Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.
Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol. Store away from oxidizers.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
LVP Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m3 TWA (Inhalable) ACGIH TLV (as Mineral oil) 5 mg/m3 TWA OSHA PEL (as Oil mist, mineral)
Aliphatic Hydrocarbon	1200 mg/m3 TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA, 30,000 ppm STEL ACGIH TLV 5000 ppm TWA OSHA PEL

The Following Controls are Recommended for Normal Consumer Use of this Product
Appropriate Engineering Controls: Use in a well-ventilated area.
Personal Protection:
Eye Protection: Avoid eye contact. Always spray away from your face.
Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.
Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended
Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.
Personal Protection:
Eye Protection: Safety goggles recommended where eye contact is possible.
Skin Protection: Wear chemical resistant gloves.
Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.
Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Light amber liquid	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8%
Odor:	Mild petroleum odor	Vapor Pressure:	95-115 PSI @ 70°F
Odor Threshold:	Not established	Vapor Density:	Greater than 1 (air=1)
pH:	Not Applicable	Relative Density:	0.8 – 0.82 @ 60°F
Melting/Freezing Point:	Not established	Solubilities:	Insoluble in water
Boiling Point/Range:	361 - 369°F (183 - 187°C)	Partition Coefficient; n-octanol/water:	Not established
Flash Point:	138°F (59°C) Tag Closed Cup (liquid)	Autoignition Temperature:	Not established

Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas):	Flammable Aerosol	Viscosity:	2.79-2.96 cSt @ 100°F
VOC:	24.1% MIR=0.43gO3/gVOC	Pour Point:	-63°C (-81.4°F) ASTM D-97

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions
Chemical Stability: Stable
Possibility of Hazardous Reactions: May react with strong oxidizers generating heat.
Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.
Incompatible Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:
Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis.
Eye Contact: Contact may be irritating to eyes. May cause redness and tearing.
Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
Chronic Effects: None expected.
Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.
Reproductive Toxicity: None of the components is considered a reproductive hazard.
Numerical Measures of Toxicity:
Acute Toxicity Estimates: Oral > 5,000 mg/kg; Dermal >2,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.

12 – Ecological Information

Ecotoxicity: No specific aquatic toxicity data is currently available; however components of this product are not expected to be harmful to aquatic organisms
Persistence and Degradability: Components are readily biodegradable.
Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.
Mobility in Soil: No data available
Other Adverse Effects: None known

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Do not puncture or incinerate containers, even empty. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: UN1950, Aerosols, 2.1 Ltd. Qty
(Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY
ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1

NOTE: WD-40 Company does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:
CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
SARA TITLE III:
Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure
Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None
Section 302 Extremely Hazardous Substances (TPQ): None
EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not require a California Proposition 65 warning.
VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.
Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

16 – Other Information

HMIS Hazard Rating:
Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: March 5, 2019 Supersedes: July 19, 2018

Revision Summary: Section 9 update VOC data

Prepared by: Industrial Health & Safety Consultants, Inc. Shelton, CT, USA

Reviewed by: I. Kowalski Regulatory Affairs Dept.

1012200/No.0084704

SAFETY DATA SHEET

Supertech™ High Mileage Motor Oill, SAE 5W-30

Section 1. Identification

GHS product identifier : Supertech™ High Mileage Motor Oill, SAE 5W-30

Synonyms : Motor oil

Code : 610109411

Supplier's details : CITGO Petroleum Corporation
P.O. Box 4689
Houston, TX 77210
sdsvend@citgo.com

Emergency telephone number : Technical Contact: (800) 248-1814
Medical Emergency: (832) 486-4700
CHEMTREC Emergency: (800) 424-9300
(United States Only)

Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Avoid contact with eyes, skin and clothing. May be harmful if swallowed. IF IN EYES: Rinse cautiously with water for several minutes. If swallowed, do not induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.

Prevention : Not applicable.

Response : Not applicable.

Storage : Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Motor oil

CAS number/other identifiers

CAS number : Not applicable.

Any concentration shown as a range is to protect confidentiality or is due to process variation.

Section 3. Composition/information on ingredients

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : Treat symptomatically and supportively.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur oxides
phosphorus oxides

Section 5. Fire-fighting measures

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None identified.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state : Liquid.

Color : Amber.

Odor : Mild petroleum odor

pH : Not available.

Boiling point : Not available.

Flash point : Open cup: 232°C (449.6°F) [Cleveland.]

Evaporation rate : <1 (n-butyl acetate. = 1)

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : <0.0013 kPa (<0.01 mm Hg) [room temperature]

Vapor density : >1 [Air = 1]

Relative density : 0.8616

Density lbs/gal : Estimated 7.18 lbs/gal

Gravity, °API : Estimated 33 @ 60 F

Solubility : Insoluble in the following materials: cold water

Section 9. Physical and chemical properties

Viscosity : Kinematic (40°C (104°F)): 0.657 cm^2/s (65.7 cSt)

Viscosity SUS : Estimated 5.35410116089539E-05 SUS @104 F

Section 10. Stability and reactivity

Reactivity : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : **Distillates (petroleum), hydrotreated heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. **Distillates (petroleum), solvent-dewaxed heavy paraffinic**: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Irritation/Corrosion

Skin : No additional information.

Eyes : No additional information.

Respiratory : No additional information.

Sensitization

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Conclusion/Summary : No additional information.

Carcinogenicity

Conclusion/Summary : No additional information.

Reproductive toxicity

Conclusion/Summary : No additional information.

Teratogenicity

Conclusion/Summary : No additional information.

Section 11. Toxicological information

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Dermal.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

Potential chronic health effects

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Section 12. Ecological information

Toxicity

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **United States inventory (TSCA 8b)**: All components are listed or exempted.

Clean Water Act (CWA) 307: zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis (phosphorodithioate); Zinc alkyl dithiophosphate

Clean Water Act (CWA) 311: vinyl acetate

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

Section 15. Regulatory information

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
vinyl acetate	<0.01	Yes.	1000	129	5000	644.8
sulphur dioxide	<0.001	Yes.	500	-	500	-

SARA 304 RQ : 62421972.5 lbs / 28339575.5 kg [8689094.5 gal / 32891800.8 L]

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
sulphur dioxide	<0.001	No.	Yes.	No.	Yes.

International regulations

International lists : **Australia inventory (AICS)**: Not determined.
China inventory (IECSC): Not determined.
Japan inventory: Not determined.
Korea inventory: All components are listed or exempted.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.
Taiwan inventory (CSNN): Not determined.

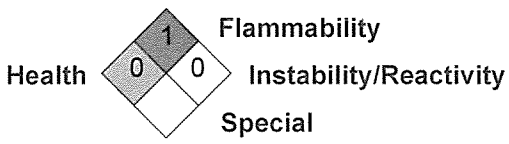
Canada inventory : All components are listed or exempted.

EU Inventory : At least one component is not listed in EINECS but all such components are listed in ELINCS.
Please contact your supplier for information on the inventory status of this material.

WHMIS (Canada) : Not controlled under WHMIS (Canada).

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA

Section 16. Other information

History

Date of issue/Date of revision : 12/4/2014.

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

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CITGO is a registered trademark of CITGO Petroleum Corporation

RECKITT BENCKISER

Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	**PROFESSIONAL LYSOL® BRAND ANTIBACTERIAL ALL PURPOSE CLEANER**
Product Description	Formerly: Professional Tergiquat® Germicidal Cleaner
Manufacturer	Reckitt Benckiser Inc. 1655 Valley Road Wayne, N.J. 07474
Product Identifier	EPA Reg. No. 675-36
Item Number	355034
Formula Number	AD-237-1
UPC Number	36241-74392 (1 gal.); 36241-74393 (5 gal.); 36241-74394 (55 gal.)

MSDS#	Not available.
Validation Date	**4/18/2000**
Print Date	1/15/2001

In case of Emergency:	Telephone: 800-677-9218 (Professional Products)
Transportation Emergencies:	Chemtrec: 800-424-9300

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits : TLV/PEL
1) ALKYLDIMETHYLBENZYLAMMONIUM CHLORIDE	68424-85-1	2.4	Not available.
2) DIDECYL DIMETHYL AMMONIUM CHLORIDE	7173-51-5	0.8	Not available.

Section 3. Hazards Identification

Emergency Overview DANGER: Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Protect eyes and skin when handling. Harmful if swallowed. Avoid contamination of food. KEEP OF OF REACH OF CHILDREN.

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water, remove contact lenses if worn, and continue flushing for at least 15 minutes. Call a physician or poison control center immediately.

Skin Contact Immediately flush with plenty of water for at least 15 minutes. If irritation occurs or persists, get medical attention.

Inhalation Move person to fresh air.

Ingestion If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician or poison control center immediately.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

Section 5. Fire and Explosion Data

Flammability	See Section 14 for any Shipping Classifications.
Flash Point	CLOSED CUP: Higher than 93.3°C (>200°F). (Tagliabue.).
Explosive Limits in Air	Not available.
Products of Combustion	Not available.
Fire and Explosion Hazards	None known.
Fire Fighting Media and Instructions	Use water spray, foam, dry chemical or carbon dioxide, as suitable for the surrounding fire.
Special Fire Fighting Instructions	Wear self-contained breathing apparatus and protective clothing appropriate for fighting a chemical fire.

Section 6. Accidental Release Measures

Accidental Spill	Small spills of the diluted (1:64 or 1:128) product may be flushed to sewer with large quantities of water. Do not discharge large quantities of concentrate or effluent containing this product to sewer systems without previously notifiying the local sewage treatment plant authority. Comply with label instructions. See Section 13.

Section 7. Handling and Storage

Handling and Storage	DANGER: Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin or on clothing. Protect eyes and skin when handling. STORAGE: Store in original container in secure areas inaccessible to small children. Keep securely closed. Do not contaminate food or feed by storage and disposal. Harmful if swallowed. Do not reuse empty container. KEEP OUT OF REACH OF CHILDREN. WARNING: Child can fall into bucket and drown. Keep children away from 5 gallon buckets with even a small amount of liquid. It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Section 8. Exposure Controls/Personal Protection

Ventilation Requirements	None required.
Eye Protection	Protect eyes when handling. Do not get in eyes. Emergency responders should wear full eye and face protection.
Skin Protection	Protect skin when handling. Do not get on skin or clothing. Remove and wash contaminated clothing before reuse. Emergency responders should wear impermeable gloves.
Respiratory Protection	None required.
Other Protection	Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.
Work/Hygienic Practices	Washing with soap and water after use is recommended as good hygienic practice to prevent possible skin irritation.

Section 9. Physical and Chemical Properties

Description	Clear liquid.
pH	10.4 [Basic.]
Boiling/Condensation Point	Not available.
Specific Gravity	1.04 @25 F
Vapor Pressure	Not available.
Vapor Density	Not available.
Viscosity	Not available.
Solubility	Miscible
Physical Chemical Comments	Not available.

Odor	Citrus / Quaternary odor.
Color	Fluorescent. Green.

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	None.
Incompatibility with Various Substances	None.
Hazardous Decomposition Products	None.
Hazardous Polymerization	Will Not Occur

Section 11. Toxicological Information

Exposure effects

Eye Contact	Causes eye damage.
Skin Contact	Causes skin irritation.
Inhalation	None expected.
Ingestion	Harmful if swallowed.
Carcinogenicity	Not listed as carcinogenic by OSHA, NTP or IARC.

Section 12. Ecological Information

Ecotoxicity	ENVIRONMENTAL HAZARD: See Section 13.

Section 13. Disposal Considerations

Waste Disposal

ENVIRONMENTAL HAZARD: Dispose of in accordance with local, state and federal regulations. Do not discharge effluent containing this product into lakes, streams, ponds. estuaries. oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For additional guidance contact your State Water Board or the local Office of the EPA.

Container Disposal: Triple rinse (or equivalent) container thoroughly with water and detergent then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or by other procedures approved by local, State and Federal Authorities. Do not reuse container.

FOLLOW LABEL INSTRUCTIONS FOR ADDITIONAL DISPOSAL REQUIREMENTS.

Section 14. Transport Information

DOT Classification	Not a DOT controlled material (United States).
Proper Shipping Name	Not applicable
DOT Identification Number	Not applicable
Packing Group	Not applicable
Maritime Transportation	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not available.
TDG Classification	Not a TDG controlled material.
ADR Classification	Not available.
IMDG Classification	Not controlled under IMDG.
IATA Classification	Not controlled under IATA.

Section 15. Regulatory Information

Federal and State Regulations

SARA Title III, Section 313 Toxic Chemical Notification & Release Reporting:

None

California Proposition 65: This product contains the following ingredients which require a warning under the Safe Drinking Water & Toxic Enforcement Act:
1) Not available.

Other Classifications

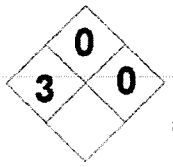
WHMIS (Canada) Not controlled under WHMIS (Canada).

Section 16. Other Information

HMIS (U.S.A.)

Health Hazard	3
Fire Hazard	0
Reactivity	0
Personal Protection	a

National Fire Protection Association (U.S.A.)



NFPA Aerosol Level Not applicable.

Validated by Product Safety on 4/13/2000.

Printed 1/15/2001.

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

The Clorox Company
1221 Broadway
Oakland, CA 94612
Tel. (510) 271-7000

Material Safety Data Sheet

I Product:	ORIGINAL PINE-SOL® BRAND CLEANER 1	
Description:	CLEAR, AMBER, THIN LIQUID WITH CHARACTERISTIC PINE ODOR	
Other Designations	**Distributor**	**Emergency Telephone Nos.**
EPA Reg. No. 5813-83	Clorox Sales Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies, call 1-800-446-1014. For Transportation Emergencies, call 1-800-424-9300 (Chemtrec).

II Health Hazard Data

Causes substantial but temporary eye injury.

No medical conditions are known to be aggravated by exposure to this product.

FIRST AID:

EYE CONTACT: Hold eye open and rinse with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. If irritation persists, call a doctor.

SKIN CONTACT: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. If irritation develops, call a doctor.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have person sip a glassful of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If breathing is affected, call a doctor.

III Hazardous Ingredients

Ingredient	Concentration	Worker Exposure Limit
Pine oil CAS # 8002-09-3	8 - 10%	Not established.
Alkyl alcohol ethoxylates CAS # 127036-24-2	3 - 7%	Not established.
Isopropyl alcohol CAS #67-63-0	1 - 5%	200 ppm - TLV-TWA[a] 400 ppm - PEL[b] 400 ppm - TLV-STEL[c]
Sodium petroleum sulfonate CAS # 68608-26-4	1 - 5%	Not established.

[a]TLV-TWA = ACGIH Threshold Limit Value - Time Weighted Average

[b]PEL = OSHA Permissible Exposure Limit - Time Weighted Average

[c]TLV-STEL = ACGIH Threshold Limit Value - Short Term Exposure Limit

None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.

IV Special Protection and Precautions

Hygienic Practices: Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

Engineering Controls: Use general ventilation or local exhaust to minimize exposure to vapor or mist.

Personal Protective Equipment: Wear safety glasses. Wear rubber or neoprene gloves if there is the potential for repeated or prolonged skin contact. In situations where exposure limits may be exceeded, a NIOSH-approved respirator is advised.

V Transportation and Regulatory Data

DOT: Not restricted per 49 CFR 173.120(a)(3) and Appendix H.

IMDG: Not restricted per IMDG Code Page 0016 Paragraph 5.1.3.1.1.

IATA: Not restricted per IATA D.G.R. Sections 3.3.1.2 and 3.3.5.

EPA - SARA Title III/CERCLA: This product is regulated under Sections 311/312. This product contains no chemicals which are regulated under Section 313 and contains benzoic acid (CAS #65-85-0, <1%) which is regulated under Section 304/CERCLA.

VI Spill Procedures/Waste Disposal

Spill Procedures: Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.

Waste Disposal: Dispose of in accordance with all applicable federal, state, and local regulations.

VII Reactivity Data

Stable under normal use and storage conditions.

VIII Fire and Explosion Data

Flash Point: 121° F (Tag closed cup).

Fire Extinguishing Agents: Dry chemical, carbon dioxide (CO_2), foam, or water spray.

IX Physical Data

pH ..... 3.0 - 4.0

Specific gravity ..... ~1.0

Solubility in water ..... Appreciable

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DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH

DATE PREPARED 6/05

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

SC Johnson
A FAMILY COMPANY

WINDEX® CLEANER ORIGINAL

Version 1.3 | Print Date 03/09/2018

Revision Date 01/23/2018 | SDS Number 350000014153

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name	:	WINDEX® CLEANER ORIGINAL
Recommended use	:	Hard Surface Cleaner
Restrictions on use	:	Use only as directed on label
Manufacturer, importer, supplier	:	S.C. Johnson & Son, Inc. 1525 Howe Street Racine WI 53403-2236
Telephone	:	+1-800-558-5252
Emergency telephone number	:	24 Hour Medical Emergency Phone: (866)231-5406 24 Hour International Emergency Phone: (703)527-3887 24 Hour Transport Emergency Phone: (800)424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Globally Harmonized System (GHS) Classification
This product does not meet the criteria for classification in any hazard class according to regulation OSHA 29 CFR 1910.1200.

Labelling

Precautionary statements
Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain hazardous chemicals at or above a reportable level as defined by OSHA 29 CFR 1910.1200

For additional information on product ingredients, see www.whatsinsidescjohnson.com.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact	:	No special requirements
Skin contact	:	No special requirements
Inhalation	:	No special requirements.
Ingestion	:	No special requirements

Most important symptoms and effects, both acute and delayed

Eyes	:	No adverse effects expected when used as directed.
Skin effect	:	No adverse effects expected when used as directed.
Inhalation	:	No adverse effects expected when used as directed.
Ingestion	:	No adverse effects expected when used as directed.

Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during firefighting	:	Container may melt and leak in heat of fire.
Further information	:	Fight fire with normal precautions from a reasonable distance. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Wash thoroughly after handling
Environmental precautions	:	Outside of normal use, avoid release to the environment.
Methods and materials for containment and cleaning up	:	Dike large spills. Clean residue from spill site.

7. HANDLING AND STORAGE

Handling

Precautions for safe handling	:	Avoid contact with skin, eyes and clothing. For personal protection see section 8. KEEP OUT OF REACH OF CHILDREN AND PETS.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers	:	Keep container closed when not in use.
Other data	:	Stable under normal conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

ACGIH or OSHA exposure limits have not been established for this product or reportable ingredients unless noted in the table above.

Personal protective equipment

Respiratory protection	:	No special requirements.
Hand protection	:	No special requirements.
Eye protection	:	No special requirements.
Skin and body protection	:	No special requirements.

Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Color	:	blue
Odour	:	floral
Odour Threshold	:	Test not applicable for this product type
pH	:	10.7 at (25 C)
Melting point/freezing point	:	0 C
Initial boiling point and boiling range	:	100 C
Flash point	:	does not flash
Evaporation rate	:	Test not applicable for this product type
Flammability (solid, gas)	:	Does not sustain combustion.
Upper/lower flammability or explosive limits	:	Test not applicable for this product type
Vapour pressure	:	Calculated31.7 hPa
Vapour density	:	Test not applicable for this product type

Relative density	:	1.00 g/cm3 at 25 C
Solubility(ies)	:	soluble
Partition coefficient: n-octanol/water	:	Test not applicable for this product type
Auto-ignition temperature	:	Test not applicable for this product type
Decomposition temperature	:	Heating can release hazardous gases.
Viscosity, dynamic	:	similar to water
Viscosity, kinematic	:	similar to water
Oxidizing properties	:	Test not applicable for this product type
Volatile Organic Compounds Total VOC (wt. %)*	:	0.2 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations
Other information	:	None identified

10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	If accidental mixing occurs and toxic gas is formed, exit area immediately. Do not return until well ventilated.

Conditions to avoid : Direct sources of heat.

Incompatible materials : Do not mix with bleach or any other household cleaners. Strong bases

Hazardous decomposition products : Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 > 5000 mg/kg
Acute inhalation toxicity : LC50 > 10 mg/L

Acute dermal toxicity : LD50 > 5000 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	No classification proposed	Inhalation - Dust and Mist
Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin corrosion/irritation	No classification proposed	-
Serious eye damage/eye irritation	No classification proposed	-
Skin sensitisation	No classification proposed	-
Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-
Carcinogenicity	No classification proposed	-

Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ toxicity - repeated exposure	No classification proposed	-
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition : None known.

12. ECOLOGICAL INFORMATION

Product : The product itself has not been tested.

Toxicity
The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

No environmental data required.

Other adverse effects : None known.

13. DISPOSAL CONSIDERATIONS

Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

Land transport
Not classified as dangerous in the meaning of transport regulations.

Sea transport
Not classified as dangerous in the meaning of transport regulations.

Air transport
Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

Notification status : All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

State Right To Know

No components are subject to the Massachusetts Right to Know Act.		
No components are subject to the Minnesota "Right To Know" Act		
No components are subject to the New Jersey "Right To Know" Act		
Pennsylvania RTKL	Water	7732-18-5
	Ammonium Hydroxide	1336-21-6

16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	0
Reactivity	0

NFPA Ratings

Health	1
Fire	0
Reactivity	0
Special	-

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

Further information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Prepared by	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)

P&G Professional™

SAFETY DATA SHEET

Issuing Date: 09-Jan-2015 **Revision Date:** 07-Apr-2015 **Version** 2

1. IDENTIFICATION

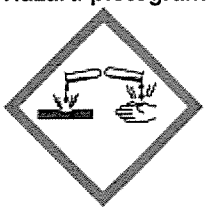
Product Name	Comet® Cleaner with Bleach - Ready to Use
Product Code(s)	3-30
Product ID:	15154199_PROF_NG
Product Type:	Finished Product - Professional Use Only
Recommended Use	Hard Surface Cleaner
Restrictions on Use	Do not mix with other cleaning products or chemicals as irritating fumes may be formed.
Manufacturer	Procter & Gamble Professional 2 P&G Plaza Cincinnati, Ohio 45202 Procter & Gamble Inc. P.O. Box 355, Station A Toronto, ON M5W 1C5 1-800-332-7787
E-mail Address	pgsds.im@pg.com
Emergency Telephone	Transportation (24 HR) CHEMTREC - 1-800-424-9300 (U.S./ Canada) or 1-703-527-3887 Mexico toll free in country: 800-681-9531

2. HAZARD IDENTIFICATION

This product is classifed under 29CFR 1910.1200(d) and the Canadian Hazardous Products Regulation as follows:.

Hazard Category	
Eye Damage / Irritation	Category 2B
Corrosive to metals	Category 1
Signal Word	WARNING
Hazard Statements	Causes eye irritation May be corrosive to metals

Hazard pictograms



Precautionary Statements - Prevention	Wash hands thoroughly after handling Keep only in original container Do not mix with other cleaning products or chemicals as irritating fumes may be formed
Precautionary Statements - Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF SWALLOWED: Drink 1 or 2 glasses of water Absorb spillage to prevent material damage
Precautionary Statements - Storage	Store in corrosive resistant container
Precautionary Statements - Disposal	Dispose of contents/container in accordance with local regulation
Hazards not otherwise classified (HNOC)	None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients are listed according to 29CFR 1910.1200 Appendix D and the Canadian Hazardous Products Regulation

Chemical Name	Synonyms	Trade Secret	CAS-No	Weight %
Sulfuric acid, monooctyl ester, sodium salt (1:1)	-	No	142-31-4	1 - 5
Sulfuric acid monododecyl ester sodium salt (1:1)	-	No	151-21-3	1 - 5
Sodium hypochlorite	-	No	7681-52-9	1 - 5

4. FIRST AID MEASURES

First aid measures for different exposure routes

Eye contact	Rinse with plenty of water. Get medical attention immediately if irritation persists.
Skin contact	Rinse with plenty of water. Get medical attention if irritation develops and persists.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately if symptoms occur.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Most important symptoms/effects, acute and delayed	None under normal use conditions.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO_2, alcohol-resistant foam or water spray.
Unsuitable Extinguishing Media	None.

Special hazard	None known.
Special protective equipment for fire-fighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Specific hazards arising from the chemical	None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment. Do not get in eyes, on skin, or on clothing.
Advice for emergency responders	Use personal protective equipment as required.

Methods and materials for containment and cleaning up

Methods for containment	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store in corrosive resistant container.
Incompatible products	Do not mix with other cleaning products or chemicals as irritating fumes may be formed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines	No exposure limits noted for ingredient(s).

Exposure controls

Engineering Measures	**Distribution, Workplace and Household Settings:** Ensure adequate ventilation **Product Manufacturing Plant (needed at Product-Producing Plant ONLY):** Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

Personal Protective Equipment

Eye Protection	**Distribution, Workplace and Household Settings:** No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Use appropriate eye protection

Hand Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Protective gloves

Skin and Body Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
Wear suitable protective clothing

Respiratory Protection

Distribution, Workplace and Household Settings:
No special protective equipment required

Product Manufacturing Plant (needed at Product-Producing Plant ONLY):
In case of insufficient ventilation wear suitable respiratory equipment

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State @20°C	liquid
Appearance	clear
Odor	Scented
Odor threshold	No information available

Property	Values	Note
pH value	12.6 - 13.4	
Melting/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	> 93.3 °C / > 200 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower Flammability Limit	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	1.045	
Water solubility	100%	
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	.
Decomposition temperature	No information available	.
Viscosity of Product	No information available < 10 cps	

Oxidizing properties These substances will accelerate burning when involved in a fire.

VOC Content (%) Products comply with US state and federal regulations for VOC content in consumer products.

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions.

Stability Stable under normal conditions.

Hazardous polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

Conditions to Avoid None under normal processing.

Materials to avoid Do not mix with other cleaning products or chemicals as irritating fumes may be formed.

Hazardous Decomposition Products None under normal use.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Inhalation No known effect.
Skin contact No known effect.
Ingestion No known effect.
Eye contact Irritating to eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity No known effect.
Skin corrosion/irritation No known effect.
Serious eye damage/eye irritation Irritating to eyes.
Skin sensitization No known effect.
Respiratory sensitization No known effect.
Germ cell mutagenicity No known effect.
Neurological Effects No known effect.
Reproductive toxicity No known effect.
Developmental toxicity No known effect.
Teratogenicity No known effect.
STOT - single exposure No known effect.
STOT - repeated exposure No known effect.
Target Organ Effects No known effect.
Aspiration hazard No known effect.
Carcinogenicity No known effect.

Component Information

Chemical Name	CAS-No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sulfuric acid monododecyl ester sodium salt (1:1)	151-21-3	977 mg/kg bw (OECD 401; rat)	> 500 mg/kg bw (Read across data C10-16ASO4, NH4; guideline: Standard Procedure #10; fixed dose procedure; rabbit; based on active ingredient)	-
Sodium hypochlorite	7681-52-9	626 mg/kg bw (Similar to OECD 401; standard acute method; rat)	> 20000 mg/kg bw (Guideline: 16 CFR 1500.40 and similar to OECD 402; rabbit)	> 10.5 mg/L air (Similar to OECD 403; rat; 1 h)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Mobility No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste from Residues / Unused Products	Products covered by this MSDS, in their original form, when disposed as waste, are corrosive hazardous waste, D002, according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations.
Contaminated packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.
California Hazardous Waste Codes (non-household setting)	331

14. TRANSPORT INFORMATION

DOT

UN no	UN1760
UN Proper shipping name	Corrosive liquids, n.o.s.
Description	UN1760, Corrosive liquid, n.o.s, (sodium hydroxide, sodium hypochlorite), 8,III , Ltd. Qty.
Hazard Class	8
Packing Group	III

IMDG

UN Number	UN1760
UN Proper shipping name	Corrosive liquid, n.o.s.
Description	UN1760, Corrosive liquid, n.o.s , (sodium hydroxide, sodium hypochlorite), 8, III, MARINE POLLUTANT , Ltd. Qty.
Transport hazard class(es)	8
Packing Group	III

IATA

UN no	UN1760
UN Proper shipping name	Corrosive liquid, n.o.s.
Description	UN1760, Corrosive liquid, n.o.s, (sodium hydroxide, sodium hypochlorite), 8,III , Ltd. Qty.
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	CAS-No	Hazardous Substances RQs	Extremely Hazardous Substances RQs	CERCLA/SARA 302 TPQ
Sodium hypochlorite	7681-52-9	100 lb	-	
Sodium hydroxide	1310-73-2	1000 lb	-	

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Clean Water Act
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CAS-No	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hypochlorite	7681-52-9	100 lb	-	-	X
Sodium hydroxide	1310-73-2	1000 lb	-	-	X

California Proposition 65
This product is not subject to warning labeling under California Proposition 65

U.S. State Regulations (RTK)

Chemical Name	CAS-No	New Jersey
Sodium hypochlorite	7681-52-9	X

Chemical Name	CAS-No	Massachusetts
Sodium hypochlorite	7681-52-9	X

Chemical Name	CAS-No	Pennsylvania
Sodium hypochlorite	7681-52-9	X
Sodium hydroxide	1310-73-2	X

Chemical Name	CAS-No	Rhode Island
Sodium hypochlorite	7681-52-9	X

International Inventories

United States
All intentionally-added components of this product(s) are listed on the US TSCA Inventory.

Canada
This product is in compliance with CEPA for import by P&G.

Legend
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
CEPA - Canadian Environmental Protection Act

16. OTHER INFORMATION

HMIS Ratings
Health hazard 2
Flammability 1
Physical hazard 0

NFPA Ratings
Health hazard 2
Flammability 1
Instability 0

Issuing Date: 09-Jan-2015
Revision Date: 07-Apr-2015
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

Revision Number: 036.0 **Issue Date:** 04/20/2015

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product identifier used on the label:

Dial® Antibacterial Hand Soap – Mountain Fresh, Spring Water, Pomegranate and Tangerine, Gold, Aloe
Dial® Antibacterial Hand Soap – White Tea & Vitamin E (Fresh Snow)
Berkley & Jensen® Antibacterial Liquid Hand Soap
Dial® Antibacterial Hand Soap – Hello Kitty
Dial® Seasonals Collection Antibacterial Liquid Hand Soap – Blackberry & Coriander, Red Grapes & Mint, Cranberry & Fig, Spiced Apple & Pear, Tropical Bloom, Fruit Splash, Exotic Escape, Refreshing Escape
Dial® Skin Therapy Antibacterial Liquid Hand Soap - Himalayan Pink Salt
Dial® Lavender & Twilight Jasmine Antibacterial Liquid Hand Soap
Dial® Gold Antibacterial Hand Soap – Professional
Liquid Dial® with Moisturizers
Liquid Dial® Sensitive Skin

Other means of identification:

714729, 1631912 (Mountain Fresh); 1533782, 714757, 1631890, 1763465 (Spring Water); 1112000, 1151446, 1631899 (Pomegranate and Tangerine); 1198192, 1305319, 1632015, 1679927 (Gold); 1198180, 1305318, 1632019, 1661407, 1679939, 1763472 (Aloe); 1362663, 1631897 (White Tea & Vitamin E, Fresh Snow); 1365866 (Berkley & Jensen); 1605423, 1606021, 1631872 (Hello Kitty); 1693185 (SC Blackberry & Coriander), 1693201 (SC Red Grapes & Mint), 1713197 (SC Cranberry & Fig); 1713166 (SC Spiced Apple & Pear); 1742158 (SC Tropical Bloom); 1729985 (SC Fruit Splash); 1802082 (Exotic Escape); 1802073 (Refreshing Escape); 1715643 (Skin Therapy - Himalayan Pink Salt), 1778120 (Lavender & Twilight Jasmine); 1679927 (Professional); 1756809 (w/Moisturizers); 1756400 (Sensitive Skin)

Recommended use of the chemical and restrictions on use:

Liquid Antibacterial Hand Soap; No restrictions on use

Name, address and telephone number of the chemical manufacturer:

The Dial Corporation, a Henkel Company
7201 E. Henkel Way
Scottsdale, AZ 85255-9672 USA

CHEMTREC: 1-800-424-9300 (24 hours daily)
Internet: www.henkelna.com

Emergency telephone number: Medical Emergencies: 1-888-689-9082

2. HAZARD IDENTIFICATION

The hazards described in this OSHA Globally Harmonized System Safety Data Sheet (SDS) are not intended for consumers, and does not address consumer use of the product. For information regarding consumer applications of this product, refer to the product label.

Classification of the substance or mixture in accordance with paragraph (d) of §1910.1200

HAZARD CLASS	HAZARD CATEGORY
None	None

Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

Signal word: Not prescribed
Hazard Statement(s): Not prescribed
Symbol(s): None

Precautionary Statements:
Prevention: Not prescribed
Response: Not prescribed
Storage: Not prescribed
Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Hazards not otherwise classified: Not available.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The following chemicals are classified as health hazards in accordance with paragraph (d) of § 1910.1200.

Chemical Name*	CAS Number (Unique Identifier)	Concentration
Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO	68585-34-2	5 – 10 %
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	61789-40-0	1 – 5 %

*The specific chemical identity and/or exact percentage (concentration) of composition has been withheld because a trade secret is claimed in accordance with paragraph (i) of §1910.1200.

4. FIRST AID MEASURES

Description of necessary measures

Inhalation: First aid measures not required.
Skin contact: First aid measures not required. Cosmetic product and therefore not necessary.
Eye contact: Rinse eyes immediately with plenty of water, occasionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation develops.
Ingestion: Dilution by rinsing the mouth and giving water or milk to drink is generally recommended. Contact physician or local poison control center.

Most important symptoms and effects, both acute and delayed

After eye contact: May cause mild transient irritation. After skin contact: Repeated or prolonged excessive exposure may cause irritation or dermatitis. After ingestion: Nausea and possible vomiting may occur. After inhalation: Unlikely to occur due to the physical properties of the product. At elevated temperatures, vapors or mists may cause irritation.

Indication of any immediate medical attention and special treatment needed

After eye contact: Rinse eyes with plenty of water until no evidence of product remains. After skin contact: Rinse affected area with mild soap and water until no evidence of product remains. After ingestion: Dilution by rinsing the mouth and giving a glass of water to drink is generally recommended. After inhalation: Remove from exposure area to fresh air.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Dry chemical, carbon dioxide, water spray or regular foam.
Unsuitable extinguishing media: None known

Specific hazards arising from the chemical

Oxides of carbon and oxides of nitrogen.

Special protective equipment and precautions for fire-fighters

In case of fire, wear a full-face positive-pressure self-contained breathing apparatus and protective suit. Shut off all ignition sources. Move containers from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Use flooding amounts of water as a fog, solid streams may be ineffective. Avoid breathing hazardous vapors, keep upwind.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear skin, eye and respiratory protection as recommended in Section 8. Stop or reduce any leaks if it is safe to do so. Spills present a slipping hazard. Keep unnecessary personnel away. Ventilate spill area if possible. Make sure area is slip-free before re-opening to traffic.

Environmental Precautions

Small or household quantities may be disposed in sewer or other liquid waste system. For larger quantities check with your local water treatment plant.

Methods and materials for containment and cleaning up

SMALL SPILLS: Contain and absorb with absorbent material and place into containers for later disposal. Wash site of spillage thoroughly with water. LARGE SPILLS: Dike far ahead of spill to prevent further movement. Recover by pumping or by using a suitable absorbent material and place into containers for later disposal. Dispose in suitable waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

Do not get in eyes. Do not take internally. Use with adequate ventilation. Avoid generating aerosols and mists.

Conditions for safe storage, including any incompatibilities

Store in original containers in a cool dry area. Storage areas for large quantities (warehouse) should be well ventilated. Keep the containers tightly closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

Hazardous Component(s)	ACGIH	OSHA PEL	AIHA WEEL	OTHER
Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO	None	None	None	None

Appropriate engineering controls
Provide local exhaust or general dilution ventilation to keep exposure to airborne contaminants below the permissible exposure limits where mists or vapors may be generated.

Individual protection measures

Respiratory: Air contamination monitoring should be carried out where mists or vapors are likely to be generated, to assure that the employees are not exposed to airborne contaminants above the permissible exposure limits.

Eye: Splash-proof safety glasses are required to prevent eye contact where splashing of the product may occur.

Hand/Body: Protective gloves are required where repeated or prolonged skin contact may occur.
Protective clothing is required where repeated or prolonged skin contact may occur.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	liquid, colorless
Odor:	citric, green, fresh
Odor threshold:	Not available.
pH:	5.20 - 6.20 (25 °C)
Melting point/ range:	Not available.
Boiling point/range:	Not available.
Flash point:	> 93.3 °C (> 199.94 °F)
Evaporation rate:	Not available.
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Vapor pressure:	Not available.
Vapor density:	Not available.
Solubility in water:	Soluble
Partition coefficient (n-octanol/water):	Not available.
Autoignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	3,000 – 8,000 mPas
VOC content:	Not available.
Specific gravity:	1.024 at 20 °C (68°F)

10. STABILITY AND REACTIVITY

Reactivity: This product may react with strong alkalies.

Chemical stability: Stable under normal ambient temperature (70°F, 21°C) and pressure (1 atm).

Possibility of hazardous reactions: Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

Conditions to avoid: Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials: Strong oxidizers and alkalis.

Hazardous decomposition products: Thermal decomposition may release toxic and/or hazardous gases, including ammonia.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure including symptoms related to characteristics

Inhalation: Unlikely to occur due to the physical properties of the product. At elevated temperatures, vapors or mists may cause irritation.
Skin contact: Not a hazard under normal use conditions.
Eye contact: This product may cause slight irritation.
Ingestion: May cause mild gastrointestinal irritation with nausea, vomiting, diarrhea and abdominal pain.
Physical/Chemical: No physical/chemical hazards are anticipated for this product.

Other relevant toxicity information:
This product is a personal care or cosmetic product. Direct contact with eyes may cause irritation. No adverse effects are anticipated to skin from normal use.

Numerical measures of toxicity, including delayed and immediate effect

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO	None	Irritant
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	None	Irritant, Allergen

Carcinogenicity information

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen
Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO	No	No	No
1-Propanaminium, 3-amino-N- (carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	No	No	No

Carcinogenicity None of the ingredients in this product are listed as carcinogens by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA).
Mutagenicity None of the ingredients in this product are known to cause mutagenicity.
Toxicity to reproduction None of the ingredients in this product are known to have reproductive, fetal, or developmental hazards.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity:
This product is anticipated to be safe for the environment at concentrations predicted in household settings under normal use conditions.

Toxicity to fish:
The aquatic toxicity profile of this product has not been determined.

Toxicity to aquatic invertebrates:
The aquatic toxicity profile of this product has not been determined.

Toxicity to algae:
The aquatic toxicity profile of this product has not been determined.

Persistence and Degradability: The persistence and degradability of this product has not been determined. The hazardous ingredients are readily biodegradable.

Hazardous substances	Result value	Route of application	Species	Method
Alcohols, C10-16, ethoxylated, sulfates, sodium salts, 2EO	Readily biodegradable	aerobic	80 – 83 %	OECD 301 B (CO_2 evolution)
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,Ndimethyl-,N-coco acyl derivs., hydroxides, inner Salts	Readily biodegradable	aerobic	86 %	OECD 301 D (closed bottle)

Bioaccumulation Potential: The bioaccumulation potential of this product has not been determined.

Mobility: The mobility of this product (in soil and water) has not been determined.

13. DISPOSAL CONSIDERATIONS

Waste Number and Description: Not applicable, not regulated.

Disposal Considerations:
Disposal of products: This product is not a RCRA hazardous waste and can be disposed of in accordance with federal, state and local regulations.
Disposal of packages: Place in trash.

Additional information: Observe all federal, state and local regulations when storing or disposing of this substance

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)
Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name:	None
Hazard class or division:	None
Identification number:	None
Packing group:	None

Water Transportation (IMO/IMDG)

Proper shipping name:	None
Hazard class or division:	None
Identification number:	None
Packing group:	None
Marine pollutant:	None

15. REGULATORY INFORMATION

Occupational safety and health act: Hazard Communication Standard, 29 CFR 1910.1200(g) Appendix D. The Occupational Safety and Health Administration (OSHA) require that the Safety Data Sheets (SDSs) are readily accessible to employees for all hazardous chemicals in the workplace. Since the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers, this SDS may contain health hazard information not relevant to consumer use.

United States Regulatory Information:

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302:	None above reporting de minimis
CERCLA/SARA Section 311/312:	Not available.
CERCLA/SARA Section 313:	None above reporting de minimis
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information:

CEPA DSL/NDSL Status: One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

This safety data sheet contains changes from the previous version in sections: 2, 12

Prepared by: R&D Support Services

Issue date: 04/20/2015 **Supercedes:** Rev. 35, 08/06/2014

Johnson & Johnson
CONSUMER PRODUCTS COMPANY
Division of Johnson & Johnson Consumer Companies, Inc.

10-001-115

Material Safety Data Sheet

Product code: JJCUSLAG
Revision date: 05-22-2008

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Supplier:
Johnson and Johnson Consumer Companies, Inc.
199 Grandview Road
Distributor
Skillman, NJ
08558-9418

10-001-115

Customer service telephone: 1-800-526-3967
Emergency telephone number: For 24-hour emergency assistance, call the 3E Company at 1 (877) 236-9871. Provide the technician with the following product tracking code: 2277.

Product name: LISTERINE® ANTISEPTIC ORIGINAL (GOLD)
Product code: JJCUSLAG
Formula #: #W002194-0377
Intended Use: For external use only.

2. HAZARDS IDENTIFICATION

Emergency overview: Flammable. This product may cause eye, skin or respiratory irritation.

Properties affecting health: This product contains ethanol which can cause liver changes, central nervous system effects, and birth defects of the developing fetus.

This material is a controlled product under WHMIS.

Principle routes of exposure:

Eye Contact: No effects expected. Contact with eyes may cause irritation.
Skin contact: May cause skin irritation.
Ingestion: Ingestion of larger amounts may cause depression to the central nervous system (e.g. dizziness, headache).
Inhalation: Overexposure may cause drowsiness, dizziness, difficulty breathing and allergic reactions.

Physico-chemical properties: No hazards resulting from the material as supplied

Hazard information:

Target Organ(s) Not available.
Reproductive effects: No effects expected. Ingestion of large quantities may cause fetal alcohol syndrome (due to alcohol content).
Mutagenic effects: No effects expected.
Sensitization: Sensitization is not expected.

Signs and symptoms: None.

Medical conditions aggravated by exposure: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product formulation contains no ingredients at their given percentages that are considered hazardous to your health.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Synonyms	Weight %
ETHYL ALCOHOL (DENATURED)	64-17-5		20-30

4. FIRST AID MEASURES

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical attention.

Skin contact: In the case of skin irritation or allergic reactions see a physician.

Ingestion: If ingested, seek medical attention immediately and show the label.

Inhalation: Move to fresh air immediately. If experiencing difficulty breathing, seek medical attention.

Protection of first-aiders: Wear suitable gloves and eye/face protection.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use any extinguishing media which is suitable for the surrounding fire.

Extinguishing media which must not be used for safety reasons: None.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for fire fighting if necessary.

Specific methods: None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure adequate ventilation.

Environmental precautions: No special environmental precautions required.

Methods for cleaning up: Wipe up with absorbent material (e.g. cloth, fleece).

7. HANDLING AND STORAGE

Handling:

Technical measures/precautions: No special technical protective measures required.

Safe handling advice: None under normal processing.

Storage:

Technical measures/storage conditions: Store per labeled instructions.

Incompatible products: Keep away from sources of ignition or fires.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Components	ACGIH (TWA - 8hr)	ACGIH (STEL)	ACGIH (Ceiling)	Skin Absorption	OSHA (TWA - 8hr)	OSHA (Ceiling)	OSHA (STEL)
ETHYL ALCOHOL (DENATURED) (20-30%) 64-17-5	1000 ppm				1000 ppm 1900 mg/m³		

Engineering controls: Ensure adequate ventilation.

Personal protective equipment

Eye protection: Eye and face protection recommended when manufacturing product.

Hand protection: Protective gloves recommended when manufacturing product.

Skin and body protection Wear suitable protective clothing. Wear suitable gloves and eye/face protection.
Respiratory protection: None required.
Other/general protection: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Physical state: Liquid
Appearance: Clear Amber Liquid
Color: Amber
Odor: Menthol

Important Health Safety and Environmental Information

Flash point: 91.4 °F 33 °C **pH:** 4.2
Water solubility: Soluble

Other information

Explosivity: None.

10. STABILITY AND REACTIVITY

Chemical stability: Stable under recommended storage conditions.
Materials to avoid: None known
Conditions to avoid: None known.
Hazardous polymerization: Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Eye contact May cause eye irritation.

Skin contact May cause skin irritation.

Ingestion May be harmful if swallowed.

Inhalation May be harmful if inhaled.

Components	LD 50 Oral	LD 50 Dermal	LC50 (mg/m³)	LC50 (ppm)
ETHYL ALCOHOL (DENATURED) (20-30%) 64-17-5	= 7060 mg/kg Rat			

Sub-Chronic/Chronic Toxicity
No repeat dose data available.

Specific effects

Target Organ(s) Not available.
Reproductive effects Not available.
Developmental effects Not available.

Components	ACGIH	IARC	OSHA	NTP

Genotoxic effects Not available.

11. TOXICOLOGICAL INFORMATION

Carcinogenic effects Not expected to be carcinogenic.

ETHYL ALCOHOL (DENATURED) (20-30%) 64-17-5		1		X

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data is available on the product itself.
Aquatic toxicity effects: No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate US, Federal, State and International regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

Contaminated packaging: None.

14. TRANSPORT INFORMATION

DOT

DOT shipping name: Consumer Commodity
Hazard class: ORM-D

IATA/ICAO

ID/UN No.: ID8000
Proper shipping name Consumer Commodity
Hazard class: 9
IATA - label: 9 Miscellaneous
ERG # ERG127

IMO/IMDG

UN/Id No.: UN1170
Proper shipping name Ethanol Solution, Limited Quantity
Hazard class: 3
Packing group: PG III
EMS No.: F-E , S-D

ADR/RID

UN/Id No.: UN 1170
Proper shipping name Ethanol Solution , Limited Quantity
Hazard class/packing group: 3 / PG III
ADR/RID-labels: 3

TDG (Canada)

UN-No: UN1170
Proper Shipping Name Ethanol solution Limited Quantity
Hazard Class: 3
Packing group: III

15. REGULATORY INFORMATION

Components	CAS Number	SARA 313	SARA 302	CERCLA	CEPA
ETHYL ALCOHOL (DENATURED) (20-30%)	64-17-5				Listed

SARA (311, 312) hazard class

Immediate health: None.
Delayed health: None.
Fire: None.
Sudden Release of Pressure Hazard: None.
Reactivity: None.

State Regulations

Components	CAS Number	NJRTK	PARTK	MARTK	RIRTK
ETHYL ALCOHOL (DENATURED) (20-30%)	64-17-5	Listed	Listed	Listed	Listed

International Inventories

Components	TSCA	DSL	NDSL
ETHYL ALCOHOL (DENATURED) (20-30%)	Listed	Listed	Not Listed

WHMIS:

WHMIS trade secret: None.
WHMIS hazard class: B2 Flammable Liquids



Notes:

1. SARA = Superfund Amendments and the Reauthorization Act.
2. CERCLA = Comprehensive Environmental Response, Compensations and Liability Act.
3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.
4. TSCA = Toxic Substance Control Act.
5. WHMIS = Canadian Workplace Hazardous Materials Information System.
6. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

This data sheet contains changes from the previous version in section(s):
None.

MSDS format:
- North American Format - U.S. and Canada

This Material Safety Data Sheet was prepared in accordance with ANSI Z400.1-2004.

Disclaimer:
The information and recommendations contained herein are based upon tests believed to be reliable. However, Johnson and Johnson does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. Johnson and Johnson assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

End of Safety Data Sheet

Vinegar

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : **Vinegar**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **S25623**

Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc
9 Barnhart Drive, Hanover, PA 17331
(717) 632-1291

Supplier Details:

Fisher Science Education
6771 Silver Crest Road, Nazareth, PA 18064
(724)517-1954

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant
Skin irritation, category 2
Eye irritation, category 2A

Skin Irritation 2
Eye Irritation 2

Signal word :Warning

Hazard statements:
Causes skin irritation
Causes serious eye irritation
Precautionary statements:
If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Wash skin thoroughly after handling
Take off contaminated clothing and wash before reuse
IF ON SKIN: Wash with soap and water
If skin irritation occurs: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
If eye irritation persists get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)

Flammability:
The mixture is being classified on the basis of the classification of the flammable ingredient at or equal to 50%

.(Source: CRC Handbook of Chemistry and Physics, 63rd Edition)

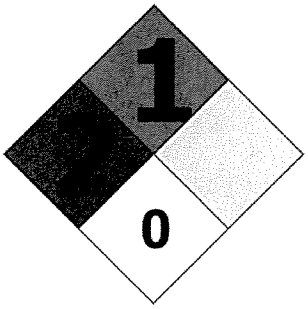
Other Non-GHS Classification:

WHMIS

B3 

E 

NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 64-19-7	Acetic Acid	5 %
CAS 7732-18-5	Deionized Water	95 %
		Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position.Seek medical advice if discomfort or irritation persists.Give artificial respiration if necessary. If breathing persists give oxygen.

After skin contact: Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.Flush with water for 15 minutes.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Immediately get medical assistance if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea,Headache, Shortness of breath.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.Notes to Physician: Treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.

Advice for firefighters:

Protective equipment:

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid contact with skin, eyes and clothing.Remove from all sources of ignition.Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.Keep away from ignition sources. Protect from heat.Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures.Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.Remove from all sources of ignition.Soak with inert material.Use spark-proof tools and explosion-proof equipment.Always obey local regulations.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Prevent formation of aerosols. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan.Use only in well ventilated areas.Avoid splashes or spray in enclosed areas.Wash hands after handling.Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents.Store in cool, dry conditions in well sealed containers. Keep container tightly sealed.Protect from freezing.

SECTION 8 : Exposure controls/personal protection





Control Parameters: 64-19-7, Acetic Acid, ACGIH TLV: 25mg/m3, OSHA PEL: 25mg/m3

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling.Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled.Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Clear, colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	0 Vol % 0 Vol %
Odor:	Vinegar-like	**Vapor pressure**:	2.3 kPa (@ 20°C) or 23 hPa (17 mm Hg) at 20 °C (68 °F)
Odor threshold:	Not determined	**Vapor density**:	0.62 (Air = 1)
pH-value:	Not determined	**Relative density**:	1 (Water = 1)
Melting/Freezing point:	0 °C (32 °F)	**Solubilities**:	Soluble in Water
Boiling point/Boiling range:	100°C (212°F)	**Partition coefficient (n-octanol/water)**:	Not determined
Flash point (closed cup):	Not applicable	**Auto/Self-ignition temperature**:	Not determined
Evaporation rate:	Not determined	**Decomposition temperature**:	Not determined
Flammability (solid,gaseous):	Not applicable	**Viscosity**:	a. Kinematic:Not determined b. Dynamic: 0.952 mPas at 20 °C (68 °F)
Density: 1 g/cm³ (8.345 lbs/gal) at 20 °C (68 °F)			

SECTION 10 : Stability and reactivity

Reactivity:
Chemical stability: No decomposition if used and stored according to specifications.
Possible hazardous reactions:
Conditions to avoid: Store away from oxidizing agents, strong acids or bases.

Hazardous decomposition products: Carbon oxides (CO, CO2).Irritating fumes

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	LD50 orl-rat: 3310 mg/kg (Acetic Acid)	
Dermal:	LC50 inhalation-rat: 5620 ppm/ 1hr. (Acetic Acid)	
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Dermal:	Section 2	Classified as a skin irritant
Ocular:	Section 2	Classified as an eye irritant
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity

Ecotoxicity: Acetic Acid has high biochemical oxygen demand, and a potential to cause oxygen depletion in aquatic systems.

Persistence and degradability: Readily degradable in the environment.
Bioaccumulative potential:
Mobility in soil: Aqueous solution has high mobility in soil.
Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water.It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.Classify as a hazardous waste.

SECTION 14 : Transport information

UN-Number

UN2790

Acetic Acid Solution

Transport hazard class(es)



Class:
8 Corrosive substances

Packing group:III
Environmental hazard:
Transport in bulk:
Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Acute

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

64-19-7 Acetic Acid 5000 lb

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations Note: The responsibility to

provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation

Effective date : 10.24.2014
Last updated : 05.27.2015

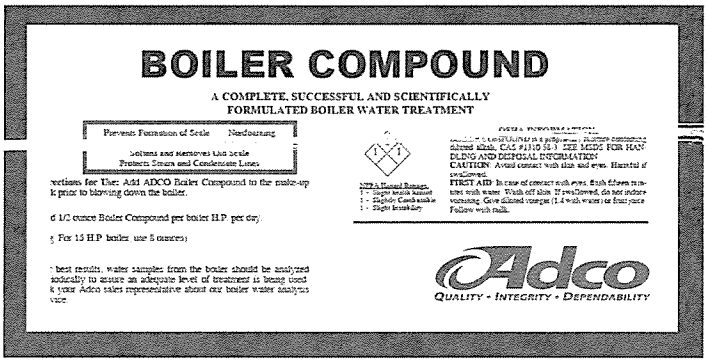
MAINTENANCE

Boiler Compound

Boiler Water Treatment

Background

Developed by Adco as its premier formulation for improving the efficiency, increasing the life expectancy and reducing the maintenance costs of boiler systems. Boiler Compound breaks down the scale that forms in a boiler, which can reduce heat transfer; it also destroys oxygen which can cause corrosive pitting, and finally carbonic acid is neutralized, which if unchecked can corrode steam piping.



Typical Application

Boiler Compound is added daily to the return tank of the boiler at a level that will treat the boiler for the entire operating day. Recommended blow down procedures should also be followed to remove the sludge and sediment that has settled in the boiler.

Top 3 Highlighted Characteristics

1. Improve Boiler Efficiency
2. Extends life of Boiler and Steam System
3. Systems Savings

Boiler Compound

	Code	Description
Maintenance		
Introduction	P - I	Injection
	P - L	Liquid Pr oduct
For mula	A - 14	Boiler T reatment
Economics		
	T - 1	Integrated Savings

Available SKUs

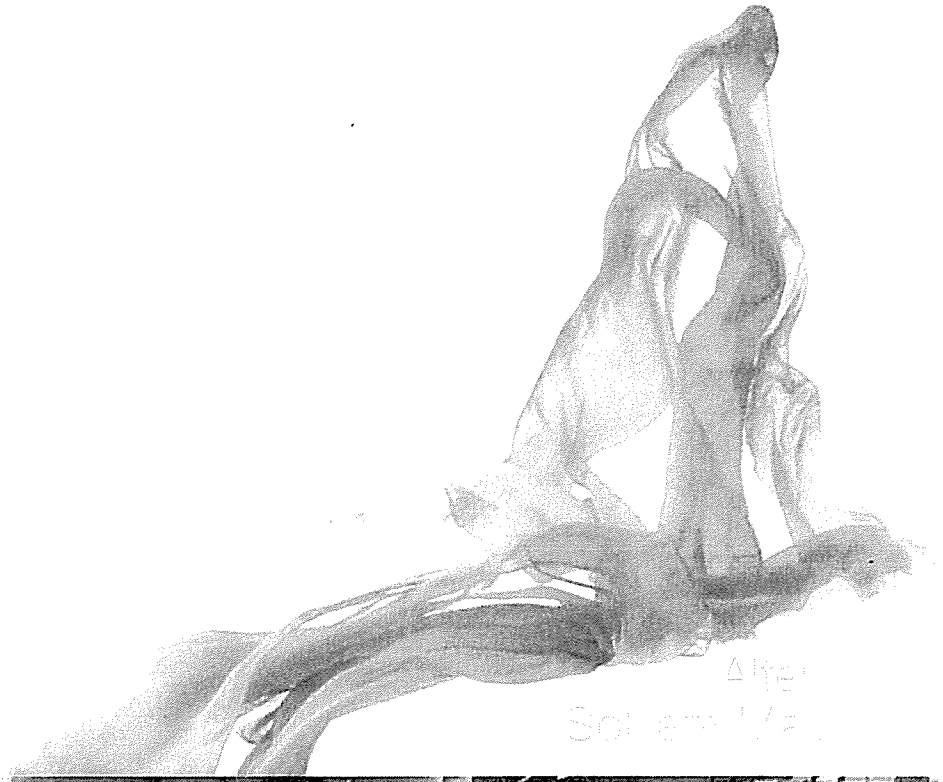
BC01G	6 gallon Case
BC06P	6 gallon Pail
BC20D	20 gallon Drum
BC55D	55 gallon Drum

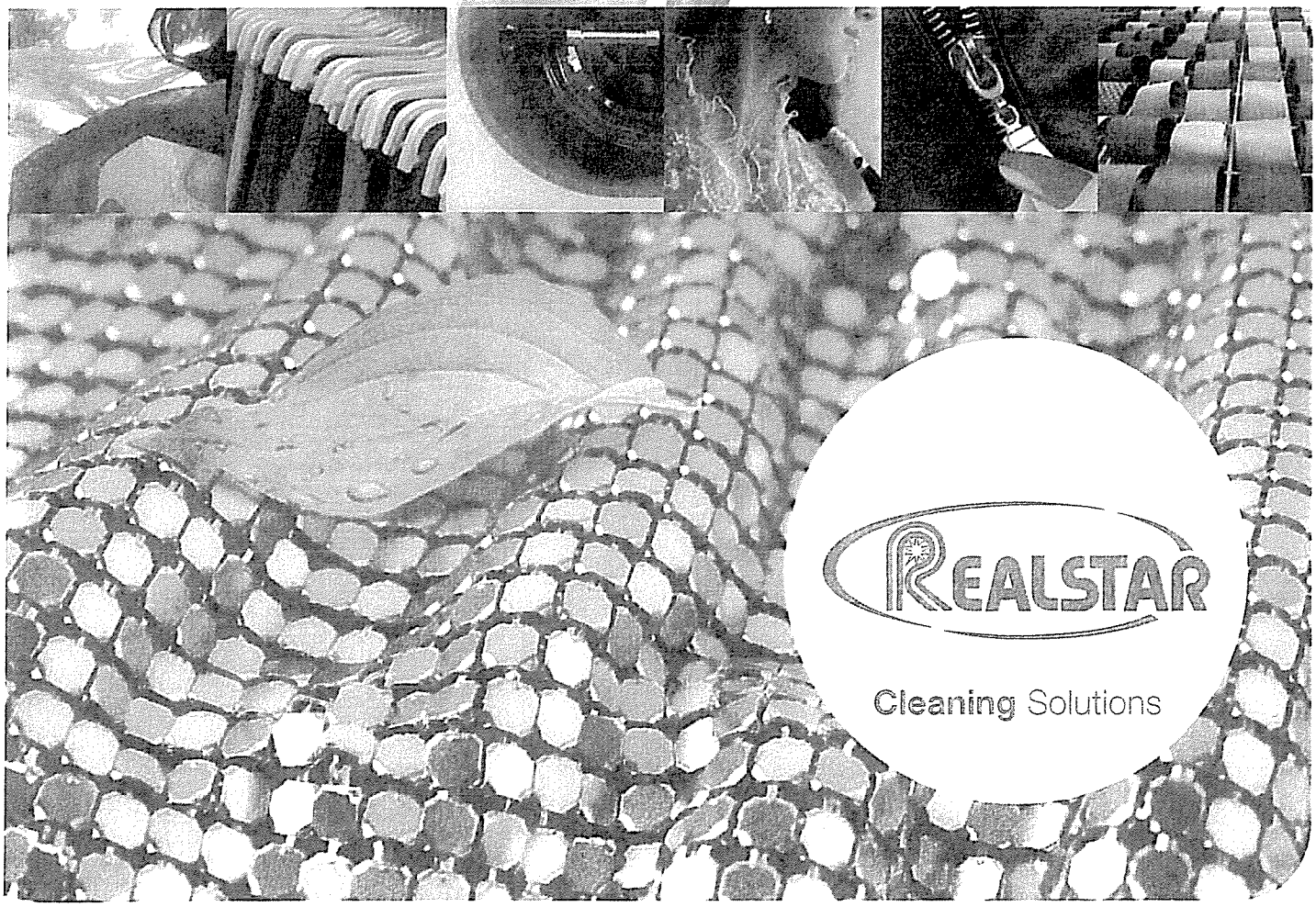
Adco
QUALITY • INTEGRITY • DEPENDABILITY

1909 W. Oakridge Albany, GA 31707 | Phone: 800.821.7556 | adco-inc.com

KT 03
KM 03
international

series





REALSTAR

Cleaning Solutions



REALSTAR
Experience and Technology
a legacy of excellence

Since the 1980's **REALSTAR** has been an innovative leader in the manufacturing of dry cleaning machines for the garment care industry.

Our commitment to research and development has resulted in machines recognized throughout the world for their highest standards of quality control, cutting edge technology, and compliance with rigid environmental regulations.

REALSTAR dry cleaning machines are manufactured in the world's most up to date and modern factories located in Bologna, Italy.

Our commitment to quality control is second to none.

Every step of the manufacturing process is closely monitored to assure that the highest tolerances are met and exceeded.

Only top quality materials and components are used.

The utilizations of laser for precision metal cutting and robots for welding ensure the machines you invest in today will provide years of trouble free service.

REALSTAR builds machines designed for use with all of the popular solvents used in the garment care industry.

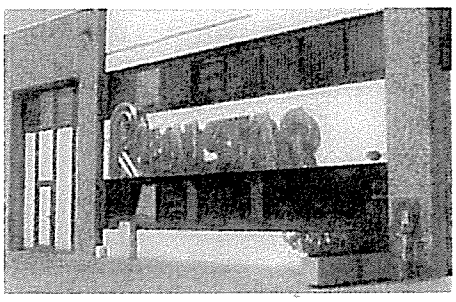
These machines are available in a wide range of sizes and configurations; all designed to comply with governmental and environmental regulations.

We offer machines that will meet the needs of the largest production facilities as well as the smaller single plants.

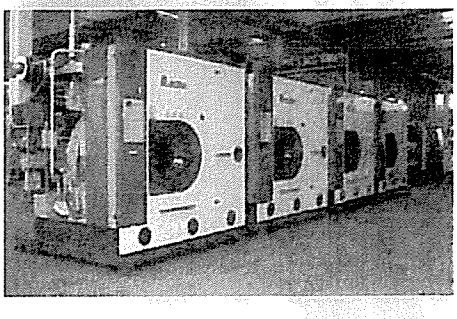
Most importantly to you, we stand behind our products.

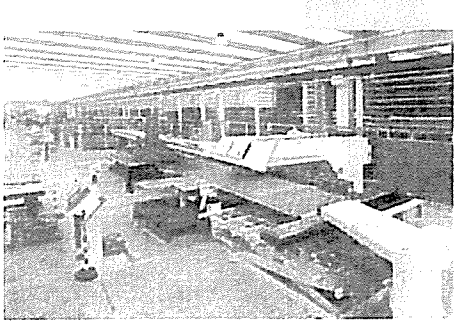
We know your success is our success.

This is the philosophy upon which we have built our business.









Intertek

set a New standard in alternative solvent dry cleaning machines

REALSTAR QUALITY and DESIGN Alternative Solvents

Our R & D at work

Two challenges must be met when designing a machine for operation in a dry cleaning plant today:

1. **It must be safe for the operator**
2. **It must meet or exceed all governmental rules and regulations, domestic US, European and International**

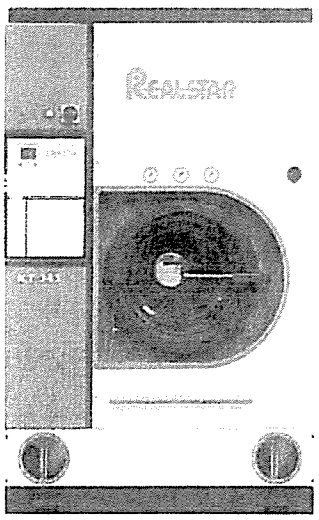
REALSTAR engineers have designed alternative solvent machines that meet the above requirements for use with any Class III A solvents such as Hydrocarbon (flashpoint 56 degree C. 132.8 F), Silicone (Green Earth), and Rynex.

Please note there is a separate **REALSTAR** brochure for our machines designed for use with Solvon K4 solvent from the Kreussler Company.

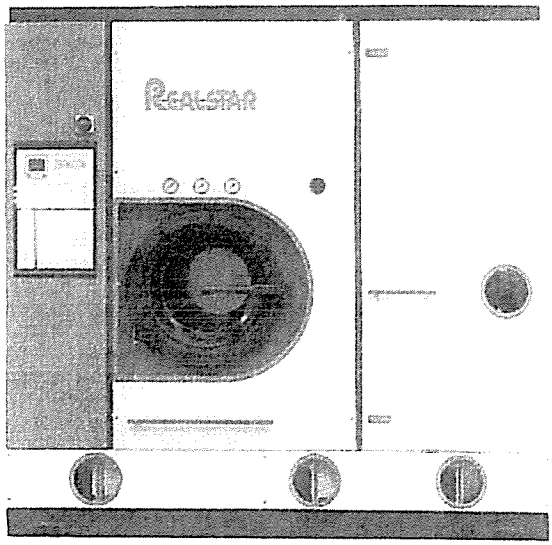
REALSTAR alternative solvent machines are available in both two tank and three tank design.

Our **KT** Series are two tank versions configured in a slim design. Our **KM** Series offer three tank versions in a traditional wide design.

Experienced dry cleaners have learned they can count on the design and technology inherent in all **REALSTAR** Alternative Solvent Machines to deliver the best results possible when using Class III A solvents.



KT



KM

KT 03 Series

Realstar KT 03 Series Machines are offered in three models:

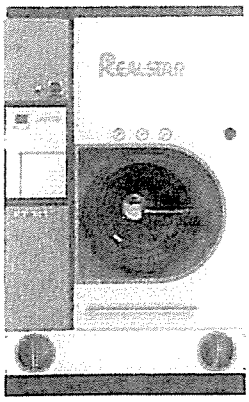
KT 343 – 18 Kg. Capacity

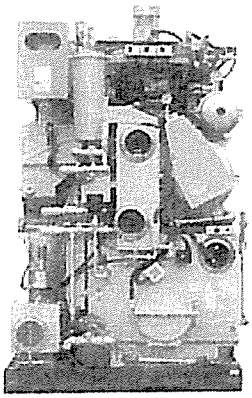
KT 403 – 20 Kg. Capacity

KT 503 – 25 Kg. Capacity

These compact machines are designed for use in those plants where space does not allow the installation of our wider **KM Series** machines, such as the narrow but deep plants often found in larger cities.

These units feature two solvent tanks with easily visible sight glasses which allow the operator to view with ease the solvent clarity and level.





All **KT Series** machines include an integral filtration and distillation system to provide maximum solvent condition.

An amply sized loading door makes it easy for the operator to load and unload the machine

Realstar KT 03 Series is the ideal solution!

		KT 343	KT 403	KT 503
LOAD CAPACITY (Ratio 1:20)	**Kg**	**18**	**20**	**25**
BASKET				
Volume	lt	340	405	500
[illegible]	mm	360	400	450
[illegible]	mm	[illegible]	[illegible]	[illegible]
[illegible]	rpm	[illegible]	[illegible]	[illegible]
[illegible]	rpm	[illegible]	[illegible]	[illegible]
Door opening	mm	500	500	500
TANKS				
Useful volume tank 1	lt	95	120	120
Useful volume tank 2	lt	150	180	180
Useful volume tank 3	lt	[illegible]	[illegible]	[illegible]
STILL				
Useful still volume at half inspection	lt	190	190	190
Total still volume	lt	225	225	225
NYLON FILTER				
Volume nylon filter housing	lt	55	55	55
Nylon filter area	m^2	1.9	1.9	1.9
Filter disks	nr	26	26	26
PURITAN FILTER				
Volume puritan filter housing	lt	15	15	15
Tube numbers	nr	1	1	[illegible]
Cartridges quantity	nr	1	1	1
DUAL CARTRIDGE FILTER				
Volume dual cartridge filter housing	lt	55	55	55
Tubes number	nr	1	1	1
Cartridge quantity	nr	2	2	2
ELECTRIC POWER			**400V 3ph 50Hz**	
Working power (ELECTRIC machine)	Kw	29.5	35.5	35.5
Maximum amperage (ELECTRIC version)	Amps	54	63	63
[illegible] (STEAM machine)	lt	8	10	12
Maximum amperage (STEAM version)	Amps	16	16	16
[illegible]	hp	÷ 3.	2	2
[illegible]	lt	0	0	
[illegible]	lt		2	
[illegible]	Kw	7	4.8	7
[illegible]	lt	0.3	0.	0.5
[illegible]	lt	[illegible]	[illegible]	[illegible]
[illegible]	lt	21	25	25
[illegible]	lt			
Steam boiler working	BTU		3	
CONNECTION SUPPLY				
Compressed air inlet	Ø	1/4"	1/4"	1/4"
Water inlet	Ø			1"
Water outlet	Ø			1"
Steam still and heater inlet		1/2"	1/2"	1/2"
Condensat still and heater outlet	Ø	1/2"	1/2"	1/2"
MACHINES DIMENSIONS				
Width front machine	mm	1230	1300	1300
Depth	mm	21	2100	22
Height without fan	mm	2040	2090	2090
Height with fan	mm	2210	2340	2340
MACHINES WEIGHTS				
Empty machine weight	Kg	1691	1820	1900
Machine weight with solv	Kg	197	2090	2190
[illegible] charge on the floor with solvent	Kg/cm²	1.6		5.4
Dynamic charge on the [illegible] 10%	Kg/cm²	111	120	1300
Packaged machine weight	Kg	1870	1930	2010
NOISE LEVEL	dB(A)	70	70	70

KM 343	KM 403	KM 503	KM 703	KM 803
18	20	25	32	40
340	400	500	645	800
90				
500	500	600	600	600
110	160	160	240	240
200	200	200	330	330
190	220	260	360	360
230	325	325	455	455
		75	75	100
26	39	39	39	52
			25	
1	1			1
2	2	2	2	2
	85	85	85	105
1		1	1	1
				4
400V 3ph 50Hz				
	6			
1,3		5,3		
	25			
5,75				
			0,55	0,5
	3			3,75
1/4"	1/4"	1/4"	1/4"	1/4"
			1"	1"
				1"
1/2"		1/2"	1/2"	1/2"
1/2"	1/2"		1/2"	1/2"
2080	2140	2140	2360	2360
155	740	740	2025	025
2095	2095	2095	2385	2385
2195	2285	2285	2580	2580
1830	2100	2180	2340	2950
300	2000	2740	3020	37
71	714	714		780
120	1081	1178	1140	1242
2110	2250	2520	3220	3330
70	70	70	70	70

KM 03 Series

Realstar KM 03 Series Machines are offered in five models:

KM 343 – 18 Kg. Capacity

KM 403 – 20 Kg. Capacity

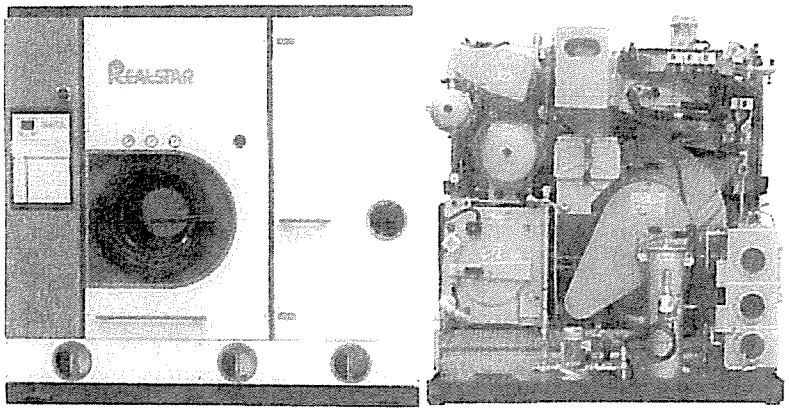
KM 503 – 25 Kg. Capacity

KM 703 – 32 Kg. Capacity

KM 803 – 40 Kg. Capacity

Realstar KM 03 Series, Alternative Solvent Machines are designed with three solvent tanks, large sized distillation system, and offer a variety of choices in filtration system.

Realstar KM 03 Series, machines are built to meet the needs of the most discriminating dry cleaning professional.



These machines are engineered to permit ease of installation, all controls are located for the maximum operator utilization, and required maintenance is facilitated by open access to the rear of the machine.

Realstar KT 03 Series is the choice of the Professional!

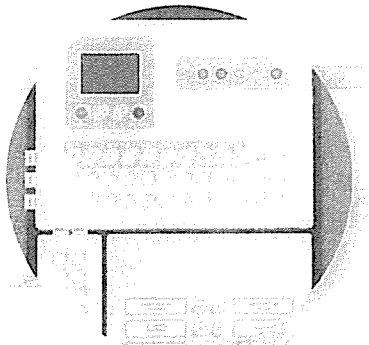
Technologies of tomorrow

KT 03
KM 03
series

PULSAR D601 with COMBI System

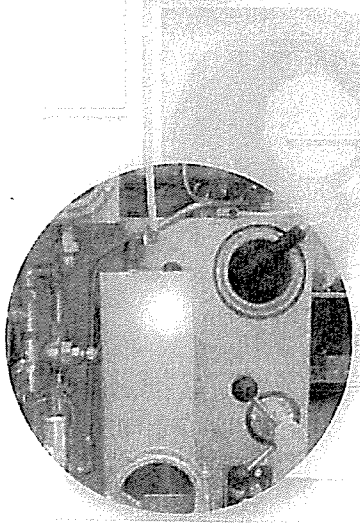
This is the most advanced control system found on any dry cleaning machine today. The **Realstar Pulsar D601 with Combi System** makes available 20 different programs for both operation as well as maintenance of the machine. It is easily self programmable by the operator and allows any portion of any program to be modified at any time. A memory card feature makes it very easy to transfer identical programs to other machines. Manual machine operations are permitted as well.

Realstar Pulsar D601 with Combi System, allows the operator to preset drying temperatures, both inlet and outlet, solvent temperatures, machine motor speeds, and dosing pump operations. "set it and forget it"! Its diagnostics capability makes it easy to solve any problems and keep machine down time to a minimum. With the **Pulsar D601 with Combi System by Realstar**, the future is here today. It is simply the best control system to be found in our industry.



Fractional Distillation

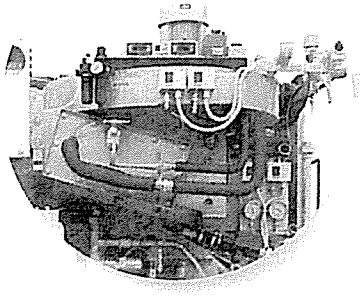
One of the most important phases in the proper operation of an alternative solvent machine is that of distillation.
An improperly designed distillation system will lead to odor causing bacteria in the solvent tanks which will transfer onto the customer's clothes. To prevent this from occurring, **Realstar** engineers have de-signed a system referred to as **fractional distillation** which is found in all of our **KT** and **KM Series** machines. Unlike the atmospheric stills used in perc machines, alternative solvent machines distill under vacuum to achieve the higher boiling points of these solvents. Our **fractional distillation** system regulates the proper amounts of solvent to the still and tanks to prevent harmful bacteria causing foam and resulting odors.



STANDARD FEATURES ON

- Floor guard, Solvent safety tray
- Air-operated interlocks and micro-switches on all doors
- Water safety valves by DANFOSS
- INVERTER on the washing motor
- Electronic and self-cleaning Dry Control
- Supplementary water separator
- Automatic Soap Pump
- Fractional distillation processing with Vacuum Technology
- Machine prepared to be connected to a Nitrogen bottle (not supplied)
- Continuous or temporary distillation
- Self-cleaning water separator
- Sound-proofing cover for Refrigeration compressor
- Microprocessor Computer

in operation today!

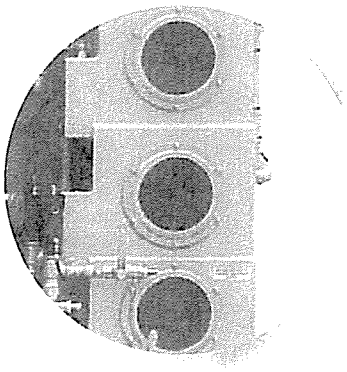


Faster drying for Shorter cycle times

It's quite simple: shorten the drying time, shorten the cycle time, increase production and increase profits. **Realstar** engineers have developed a new drying system that will shorten drying times without a loss of efficiency through:

1. Doubling the air flow through cylinder.
2. Relocating the fan midway in the coils and coordinating the refrigeration and heating coils during the drying phase to circulate larger air volume into the cylinder.
3. A new Automatic Electronic Dry Control system for maximum efficiency.

For ease of maintenance, our new refrigeration system is now divided into three segments: The compressor, the refrigeration coil, and the heat exchange coil. All three of these components can be individually and simply serviced, without removal of the entire system due to AEROQUIP unions. **Simplified maintenance and less downtime!**



Innovative pre-wash system

An optional feature humidifies the solvent during the pre-wash phase. This significantly reduces the amount of soap additives needed to remove water-soluble stains which helps to lower your cost. Solvent from the start phase of distillation is mixed with recovered solvent from the drying phase and moderately humidified. Using this solvent mixture for the pre-wash phase and during the first phase of the next cleaning cycle means more efficient and effective solvent use with further cost-savings.

ALL REALSTAR KT 03 AND KM 03 SERIES

- Allowing the operator to install up to 20 programs
- Control in 14 different languages
- Electronic temperature control
- Large choice of solvent filtration system
- Aluminium solvent valve
- Back plate washing systems
- Oversized loading door
- Automatic still wall washing
- Large double air lint filter
- Electro-Steam still system
- Electric still version with pressurized water system
- Still sight glass with lamp
- Very large impeller fan for optimal drying
- Fridge Group in three separate sections, for easy and quick maintenance

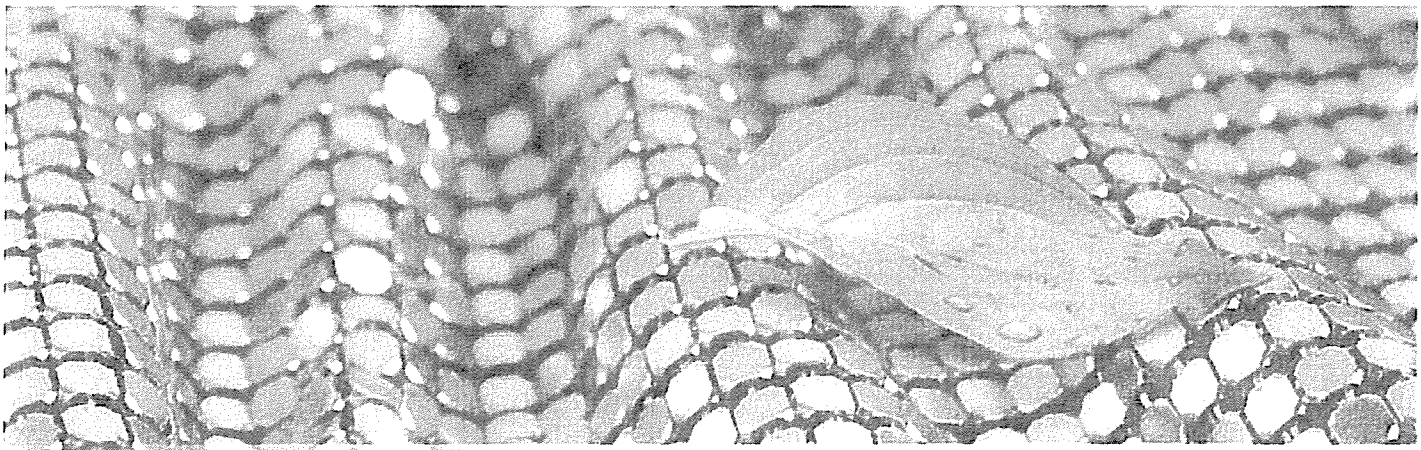


Available Options on demand:

- Automatic still clean out system
- Still Scraper
- External storage tank for still residue with connections kit
- Built in air compressor
- POLAR SYSTEM – Refrigerated solvent cooling system
- WATER SOLVENT COOLER – Refrigerated solvent cooler with water
- Steam Traps (Steam Version)
- Automatic Start/Stop steam supply to the still
- JET SOLVENT – High pressure washing system with solvent injection
- DOOR LIGHT - Loading door lighting system with LED
- Nebulizer for additives
- Built in Water Proofing System
- 2nd Automatic soap pump
- Self cleaning lint filter
- Stainless steel solvent tanks

Standard Stainless Steel components:

- Still
- Still Condenser
- Button Trap
- Water Separator
- Supplementary Water Separator
- Solvent filter housing
- Basket Cylinder
- Drying Chamber



REALSTAR

Cleaning Solutions

REALSTAR S.r.l.
Via Verde, 7/D
40012 Calderara di Reno
Bologna - Italy
Phone: (+39) 051 6814820
Fax. (+39) 051 6814322
Email: sales@realstar.it
Web: www.realstar.it

Proudly presented by:

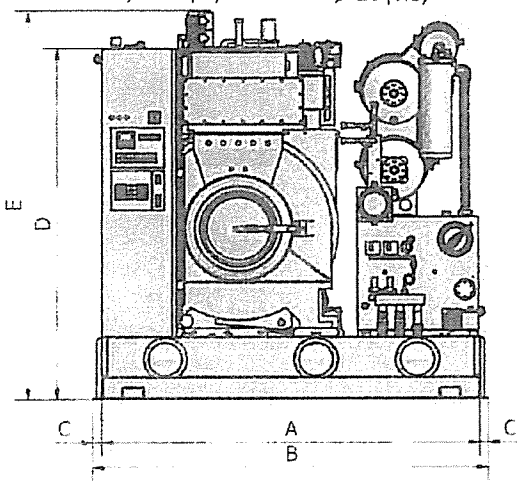
TECHINICAL INFORMATION

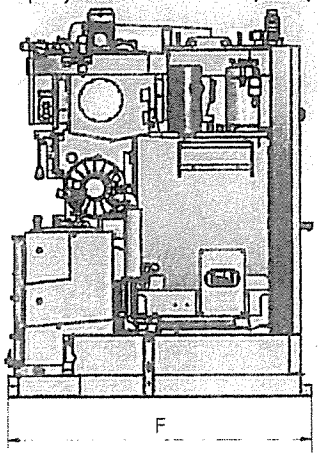
MACHINE CAPACITY	Kg *(Lbs)*	18 *(40)*	20 *(45÷50)*	25 *(55÷60)*
WASHING CHAMBER				
Volume	lt *(gal)*	340 *(90)*	400 *(106)*	500 *(132)*
Diameter	mm *(in)*	900 *(35)*	1000 *(39.4)*	1000 *(39)*
Depth	mm *(in)*	535 *(21)*	510 *(20)*	640 *(25)*
Wash speed	rpm	12 ÷ 50	12 ÷ 50	12 ÷ 50
Extract speed	rpm	300 ÷ 540	300 ÷ 540	300 ÷ 540
Door opening	mm *(in)*	500 *(20)*	500 *(20)*	500 *(20)*
SOLVENT TANKS				
Useful volume tank 1	lt *(gal)*	110 *(29)*	160 *(42)*	160 *(42)*
Useful volume tank 2	lt *(gal)*	110 *(29)*	160 *(42)*	160 *(42)*
Useful volume tank 3	lt *(gal)*	200 *(53)*	200 *(53)*	200 *(53)*
FLOOR SAFETY TANK				
Floor safety tank capacity	lt *(gal)*	360 *(95)*	430 *(114)*	430 *(114)*
STILL				
Useful volume at half inspection	lt *(gal)*	190 *(50)*	260 *(69)*	260 *(69)*
Total volume	lt *(gal)*	230 *(61)*	325 *(86)*	325 *(86)*
Boiler water capacity	lt *(gal)*	5.3 *(1.4)*	10 *(2.6)*	10 *(2.6)*

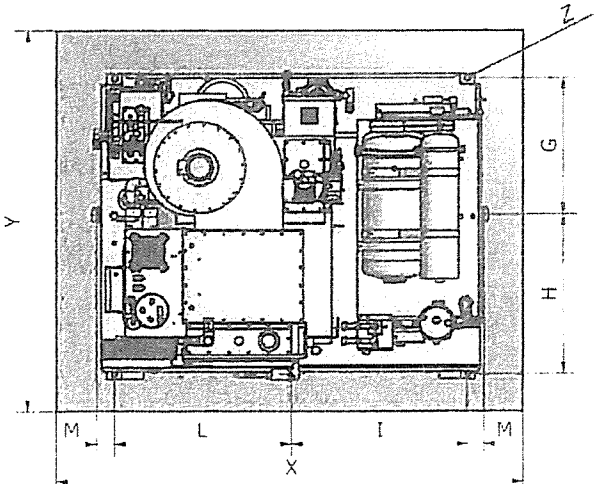
NYLON FILTER			*Optional*		*Optional*		*Optional*
Volume nylon filter housing	lt *(gal)*	55 *(14.5)*	-	75 *(20)*	-	75 *(20)*	-
Nylon filter area	mt^2 *(ft^2)*	3.9 *(42)*	-	5.5 *(60)*	-	5.5 *(60)*	-
Filter disks	nr	26	-	39	-	39	-

DECOLORATING FILTER - PR				
Decolorating housing volume - PR	lt *(gal)*	25 *(6.6)*	25 *(6.6)*	25 *(6.6)*
Decolorating cabon quantity	Kg *(Lbs)*	4 *(8.8)*	4 *(8.8)*	4 *(8.8)*
Decolorating cartridges	nr	2	2	2
FILTRO A CARTUCCIA - KR				
Volume large cartridge housing KR	lt *(gal)*	55 *(14.5)*	85 *(22.5)*	85 *(22.5)*
Area large cartridge KR	mt^2 *(ft^2)*	5.2 *(56)*	7.8 *(84)*	7.8 *(84)*
Cartridges quantity KR	nr	2	3	3

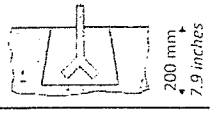
MACHINE CAPACITY	Kg *(Lbs)*	18 *(40)*	20 *(45÷50)*	25 *(55÷60)*
DIMENSIONS				
A	mm *(in)*	2000 *(78.7)*	2140 *(84.3)*	2140 *(84.3)*
B	mm *(in)*	2100 *(82.7)*	2240 *(88.2)*	2240 *(88.2)*
C	mm *(in)*	50 *(2)*	50 *(2)*	50 *(2)*
D	mm *(in)*	1965 *(77.4)*	2035 *(80.1)*	2035 *(80.1)*
E	mm *(in)*	2195 *(86.4)*	2285 *(90)*	2285 *(90)*
F	mm *(in)*	1550 *(61)*	1740 *(68.5)*	1740 *(68.5)*
FIXING POINTS				
G	mm *(in)*	647.5 *(25.5)*	780 *(30.7)*	780 *(30.7)*
H	mm *(in)*	852.5 *(33.6)*	910 *(35.8)*	910 *(35.8)*
I	mm *(in)*	930 *(36.6)*	1000 *(39.4)*	1000 *(39.4)*
L	mm *(in)*	930 *(36.6)*	1000 *(39.4)*	1000 *(39.4)*
M	mm *(in)*	95 *(3.7)*	95 *(3.7)*	95 *(3.7)*
X	mm *(in)*	2500 *(98.4)*	2650 *(104)*	2650 *(104)*
Y	mm *(in)*	2000 *(78.7)*	2250 *(88)*	2250 *(88)*
Z	Ø mm *(in)*	Ø 20 *(0.8)*	Ø 20 *(0.8)*	Ø 20 *(0.8)*







The floor safety tank can be secured to the ground by means of through screws, reinforced with anchor bolts, heavy-duty pins or with expansion stay rods.



TECHINICAL INFORMATION

MACHINE CAPACITY

GENERAL INFORMATION	Kg *(Lbs)*	18 *(40)*	20 *(45÷50)*	25 *(55÷60)*
Required water capacity				
Required water pressure	Lt/min *(gal/min)*	10 *(3)*	10 *(3)*	10 *(3)*
Required water temperature	bar *(Psi)*	3 ÷ 5 *(44 ÷ 73)*	3 ÷ 5 *(44 ÷ 73)*	3 ÷ 5 *(44 ÷ 73)*
Required air pressure	°C *(°F)*	18 ÷ 23 *(64 ÷ 73)*	18 ÷ 23 *(64 ÷ 73)*	18 ÷ 23 *(64 ÷ 73)*
Required steam still pressure *(K4)*	bar *(Psi)*	7 ÷ 8 *(100 ÷ 116)*	7 ÷ 8 *(100 ÷ 116)*	7 ÷ 8 *(100 ÷ 116)*
Required steam still pressure *(Kwl-GE)*	bar *(Psi)*	2.5 *(36)*	2.5 *(36)*	2.5 *(36)*
Required steam heater pressure	bar *(Psi)*	4 ÷ 5 *(58 ÷ 73)*	4 ÷ 5 *(58 ÷ 73)*	4 ÷ 5 *(58 ÷ 73)*
Required steam* availability ** Relative values of dry saturated steam*	bar *(Psi)*	4 ÷ 5 *(58 ÷ 73)*	4 ÷ 5 *(58 ÷ 73)*	4 ÷ 5 *(58 ÷ 73)*
	Kg/h *(Lbs/h)*	60 *(132)*	80 *(176)*	80 *(176)*

CONNECTIONS

Compressed air inlet	Ø	6 mm *(¼")*	6 mm *(¼")*	6 mm *(¼")*
Water inlet	Ø	1"	1"	1"
Water outlet	Ø	1"	1"	1"
Steam still inlet	Ø	½"	½"	½"
Condensate still outlet	Ø	½"	½"	½"
Steam heater inlet	Ø	½"	½"	½"
Condensate heater outlet	Ø	½"	½"	½"
Electric connection	-		-	
Nitrogen feeding connection (N_2)	-	-	-	-

WEIGHTS

Empty machine weight	Kg *(Lbs)*	1830 *(4035)*	2100 *(4630)*	2180 *(4805)*
Machine weight with solvent	Kg *(Lbs)*	2390 *(5269)*	2660 *(5865)*	2740 *(6050)*
Static charge on the floor with solvent	Kg/m² *(Lbs/ft²)*	771 *(158)*	714 *(146)*	736 *(150)*
Dynamic charge on the floor (+10%)	Kg/m² *(Lbs/ft²)*	1120 *(229)*	1081 *(221)*	1178 *(242)*

ELECTRIC POWER		*400V - 50Hz*	*220V - 60Hz*	*400V - 50Hz*	*220V - 60Hz*	*400V - 50Hz*	*220V - 60Hz*
MAX. Installed power *(electric version)*	kW	35.5	-	42	-	42	-
MAX. Installed power *(steam version)*	kW	11.5	12.5	15	16.5	15	16.5
MAX. Dissipated heat	Kcal	6900		8300		8300	

Notes .....