BFI Waste Systems™
BROWNING-FERRIS INDUSTRIES

WCD No. AA 20720

____ / ____ / ____ / ____
BFI WASTE CODE

# WASTE EVALUATION REQUEST

**BFI to complete this area.**

BFI Initiator ____
Location ____
Company Number ____ Date ____
Telephone Number ( ) ____
Action Requested: ☐ New Waste Approval
☐ Up-Date Approval ☐ Priority
☐ Other ____

Previous Laboratory Number ____
Disposal Method Requested ____
Disposal Site Requested ____
Company Number ____ P.O. Number ____
Analyses Requested: ☐ TEP ☐ RCI
☐ Other ____
Analyses To Follow: ☐ TEP ☐ Other ____

# WASTE CHARACTERIZATION DATA

**Special Waste**

**IMPORTANT:** THIS FORM IS TO BE COMPLETED BY A REPRESENTATIVE OF THE WASTE GENERATOR. PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS FORM. THIS FORM IS TO BE USED ONLY ONE TIME, AND MUST BE TYPEWRITTEN OR LEGIBLY PRINTED IN INK, AND SIGNED.

## 1. GENERATOR INFORMATION

a) Generator's Name: Spaulding Composites Co., Inc.
b) Generating Facility Address: 310 Wheeler Street
City: Tonawanda State: NY Zip: 14150
c) Company Representative: Gregory A. Stubbs
Title: Manager, Environmental Affairs
d) Emergency Contact: Gregory A. Stubbs
Title Manager, Environmental Affairs

e) Local Registration No. ____
Generator's EPA Id. No. NYD002104404
f) Telephone No. ( 716 ) 692-2000
After Hours No. ( 716 ) 692-2004
Emergency No. ( 716 ) 692-2000

## 2. GENERAL WASTE STREAM INFORMATION

a) Description of The Waste: Prepeg (B-Stage) Scrap
b) Process Generating Waste: Trimming of resin impregnated substrates (prepreg B-Stage)
c) Is this a "Hazardous Waste" as defined by State or local Regulations? ☐ Yes ☒ No
If yes, enter the Waste Identification Number if one has been assigned: ____
d) Is this a "Special Waste", an "Industrial Process Waste", or a "Pollution Control Waste" as defined by State or local Regulations?
☒ Yes ☐ No If yes, enter Waste Identification Number: ____
e) Recommended personal protective equipment and special handling procedures: ____
f) Anticipated Volume: 60 ☐ Gallons ☒ Tons ☐ Cubic Yards ☐ Other ____
Per: ☐ Day ☐ Week ☐ Month ☒ Year, or ☐ Other ____
To be transported in: ☒ Bulk ☐ Drums (type/size) 30 yd container ☐ Other ____
g) Is a representative sample included? ☒ Yes ☐ No - If yes, complete the RSC found on the reverse side.

## 3. WASTE PROPERTIES @ 72°F

a) Physical State:
☒ Solid ☐ Semi-solid
☐ Powder ☐ Liquid
☐ Combination ____
b) Odor:
Describe sweet phenolic
☐ None ☒ Mild ☐ Strong
c) Flash Point, °F:
☐ ≤72 ☐ 73-100 ☐ 101-140
☐ 141-200 ☐ ≥201 ☒ N/A ☐ N/D

d) Layers:
☒ Single Phase ☐ Bi-layered ☐ Multi-layered
e) Density Range: 1.2 to 1.4
☐ N/D ☐ lbs./gal. ☒ g./cc.
☐ lbs./yd.³ ☐ Other ____
f) Color(s):
Describe Variable: Amber, Brown, Black
g) pH:
☐ ≤2.0 ☐ 2.1-5.0 ☐ 5.1-9.0
☐ 9.1-12.4 ☐ ≥12.5 ☒ N/A ☐ N/D

## 4. REACTIVITY

Note if the waste exhibits any of the following reactive properties: ☐ Water Reactive ☐ Alkaline Reactive ☐ Pyrophoric ☐ Thermally Sensitive ☐ Acid Reactive ☐ Autopolymerizable ☐ Explosive ☐ Shock Sensitive ☒ None of the above

_____ /_____ /_____ /_____
BFI WASTE CODE

## 5. THIS WASTE CONTAINS

Note if the waste contains any of the following:

| | | | |
|---|---|---|---|
| ☐ Free Liquids | ☐ Dioxins | ☐ Etiological Agents | ☐ Radioactive Materials |
| ☐ Free Cyanide | ☐ Organic Solvents | ☐ Pathogens | ☐ PCBs not regulated by TSCA 40 CFR 761 |
| ☐ Free Sulfide | ☐ Used Oils | ☒ OSHA Substances | |
| ☐ Free Ammonia | ☐ Virgin Oils | ☐ Biological Materials | ☐ None of the above |

If any of the above are checked "Yes", specify type (if applicable) and include its concentration as part of the waste composition, Section 6.

## 6. COMPLETE WASTE COMPOSITION

Concentration ranges are suggested, but total must equal 100%. Units must be identified and are to be in parts per million (ppm) and/or percentages (%). Attach additional pages if necessary. NOTE: Components are mechanically bound in the resin matrix.

| Components | Range Min. / Max. | Components | Range Min. / Max. |
|---|---|---|---|
| Thermoset Resins (phenolic, epoxy, melamine) See Attached Resin Composition Sheets for Resin Constituents. | 30/60 | Substrates (paper, linen, canvas, fiberglass, aramid fiber, graphite) | 40/70 |

## 7. TRANSPORTATION INFORMATION

If the waste is a DOT Hazardous Material, complete the following: NA

Proper USDOT Shipping Name: _____

USDOT Hazard Class: _____ UN or NA Number: _____ CERCLA Reportable Quantity _____

## 8. SUPPLEMENTAL INFORMATION

☐ None ☐ MSD Sheets ☐ Analytical Data ☒ Memo/Letter ☒ Waste Composition

☐ Other - describe _____ No. of Pages 4

## 9. GENERATOR'S CERTIFICATION

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine, that no deliberate or willful omissions of composition or properties exists, that all known or suspected hazards have been disclosed, and that the waste is not designated a Hazardous Waste by the USEPA or contains PCBs regulated by TSCA 40 CFR 761.

**GENERATOR'S AUTHORIZED SIGNATORY:**

| 5-8-92 | Gregory A. Stubbs | Gregory A Stubbs | Mgr. Environmental Affairs | GS |
|---|---|---|---|---|
| DATE | PRINT NAME | SIGNATURE | TITLE | INITIALS |

## REPRESENTATIVE SAMPLE CERTIFICATE

This Section is to be completed by the person obtaining the sample of the above described waste, preferably a representative of the generator. **DO NOT** COLLECT OR SUBMIT SAMPLES THAT ARE RADIOACTIVE, SHOCK SENSITIVE, EXPLOSIVE, OR PYROPHORIC.

I certify that the sample identified below that is being forwarded to BFI for evaluation is representative of the waste described above.

Collector's Name: Gregory A. Stubbs (Peel Off Label)

Signature: Gregory A Stubbs

Company: Spaulding Composites Co., Inc.

Title: Manager, Environmental Affairs

Telephone Number: ( 716 ) 692-2000

wcd Rev: 6/90

# PHENOLIC AND EPOXY RESIN COMPOSITION

| CONSTITUENTS | CONCENTRATION % |
|---|---|
| **Resins:** | |
| Phenol-Formaldehyde<br>Cresylic Acid modified Phenol-Formaldehyde<br>Aniline modified Phenol-Formaldehyde | Various Blends |
| Cresol modified Phenol-Formaldehyde<br>Epoxy<br>Epoxy Novalak | 58.5 - 100 |
| **Catalysts:** | |
| Ammonium hydroxide | 0 - 1.5 |
| Dicyclohexylamine | 0 - 3.3 |
| Hexamethylene tetramine | 0 - 1.7 |
| Benzyldimethylamine | 0 - 0.2 |
| Diethylene triamine | 0 - 0.8 |
| Dicyandiamide | 0 - 3.4 |
| Sodium hydroxide | 0 - 1.5 |
| **Additives:** (plasticizers, flame retardants, release agents, dyes, etc.) | |
| Acintol Tall Oil Heads | 0 - 14.6 |
| Gum Rosin | 0 - 7.4 |
| Triethyl phosphate | 0 - 33.6 |
| Leucophor® (optical brightener) | 0 - 0.07 |
| Lauric acid | 0 - 1.9 |
| Dibytyl phthalate | 0 - 32.6 |

**PHENOLIC AND EPOXY RESIN COMPOSITION** (cont'd.)

| CONSTITUENTS | CONCENTRATION % |
|---|---|
| Molybdenum disulfide | 0 - 4.9 |
| Titanium dioxide | 0 - 2.3 |
| M and T Flame Retardant® | 0 - 4.9 |
| Polyvinyl butyrate | 0 - 8.2 |
| Butylbenzyl phthalate | 0 - 35.7 |
| Mold Wiz® (release agent) | 0 - 1.6 |
| Celluflex® | 0 - 6.4 |
| Nigrosine Black Dye | 0 - 2.2 |
| Black Epoxy Paste | 0 - 3.3 |
| Olive Epoxy Paste | 0 - 2.1 |
| Volan Green Dye | 0 - 1.5 |

# MELAMINE RESIN COMPOSITION

| CONSTITUENTS | CONCENTRATION (%) |
|---|---|
| **Resin:** | |
| Melamine-Formaldehyde | 97.0 - 100 |
| **Additives:** | |
| Titanium dioxide | 0 - 2.3 |
| Brown Dye | 0 - 3.0 |

SPAULDING COMPOSITES NON-HAZARDOUS WASTE TC REGULATORY IMPACT ANALYSIS

| BFI APPL. # DIST. | BFI APPL. # CORP. | APPROV. DATE DIST. | APPROV. DATE CORP. | APPROV. DATE NYSDEC |
|---|---|---|---|---|
| 141 | 26475 | 5/25/84 | 2/22/85 | 5/25/84 |

WASTE DESCRIPTION:

Resin impregnated paper and cloth (synonyms: prepreg or B-stage)
Laminated paper, cloth, and fiberglass (synonyms: plastic laminates, C-stage, Spauldite® waste)

ANALYSIS:

Cresols (methyl phenols) are the only chemicals on the TCLP list which are used in the manufacture of materials from which these wastes derive. A worst case sample was analyzed using the TCLP. The material analyzed is the prepreg manufactured by Spaulding Composites which incorporates the highest percent by weight of cresols. Results of the TCLP analysis indicated a cresol concentration of 4.0 ppm in the TCLP extract, well below the 200 ppm regulatory threshold. (See E & E Inc. laboratory report of TCLP extracts analysis - Spaulding I.D. #588571, E & E I.D. # EE-90-82457).

The prepreg is the incompletely cured precursor of the completely cured (C-stage) plastic laminate. Free cresol is present at a much higher concentration in the prepreg than in the laminate. On this technical basis it is concluded that the plastic laminate waste, if analyzed by TCLP, will result in a lower concentration of cresol in the TCLP extract than was reported for the prepreg analyzed. Dust from the bag houses generated from the sawing and sanding of plastic laminates was also analyzed using the TCLP. The dust was analyzed because of the difference in its physical state. The finely divided particulate nature of the dust increases its surface area significantly relative to other plastic laminate wastes and relative to the TCLP (sieve) requirements for solid non-particulate wastes. The large surface area of the dust potentiates leaching. Analysis of the laminate dust TCLP extract resulted in a reported cresol concentration of 0.70ppm, significantly below the TC regulatory threshold of 200 ppm. (See E & E Inc. laboratory report of TCLP extracts analysis - Spaulding sample I.D.# RLD-01, E & E Sample I.D.# EE-90-82458).

On the basis of the analytical results and knowledge of the wastes and processes generating the wastes, it is concluded that the wastes listed under this application are not hazardous as defined by the TC. It should be noted that less than 13% of the materials comprising this waste stream incorporate cresol at any concentration.. The remaining 87% of the materials comprising this waste stream do not incorporate cresol or any other TC constituent.