MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 2 Flammability = 0 Reactivity = 0 HMIS RATING: Health = 2 Flammability = 2 Reactivity = 2

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (1177A)

Manufacturer's Name:HILLYARD INDUSTRIESProduct Name:DEVASTATORAddress:302 North Fourth StreetDate Prepared:April 28, 2008

St. Joseph, MO 64501 **Prepared by:** Regulatory Affairs Department

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or accident involving chemicals.)

Other information calls: (816) 233-1321 (Ext. 8285)

http://www.hillyard.com

SECTION II -- INGREDIENTS/IDENTITY INFORMATION

Components

| (Specific Chemical Identity: | | | | OTHER LIMITS | |
|------------------------------|-----------|-----------------|-----------------|--------------|-------|
| Common Name(s) | CAS# | OSHA PEL | ACGIH TLV | RECOMMENDED | % |
| 2-Butyl cellosolve (2- | 111-76-2 | 50 ppm | 20 ppm | N.A. | 20-25 |
| Butoxyethanol)(1)* | | | | | |
| Ethanolamine (2) | 141-43-5 | 3 ppm | 3 ppm | N.A. | 5-10 |
| Water | 7732-18-5 | none | none | N.A. | |
| Benzyl alcohol | 100-51-6 | not established | not established | N.A. | |
| Sodium xylene sulfonate | 1300-72-7 | not established | not established | N.A. | |

(1) Regulated by OSHA, FL, IL, LA, MA, NJ, PA, RI. (2) Regulated by OSHA, CT, FL, IL, LA, MA, NJ, PA, RI.

VOC = 945 gm./l.; VOS = 2.84 lbs./gal.

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 210°F **Specific Gravity (H₂O = 1):** 25°C = 1.0 & 39°C = 1.0

Vapor Pressure (mm Hg.): 16.0 Percent Volatile by Volume (%): 98.17

Vapor Density (AIR = 1): 1.6 **Evaporation Rate (ethyl ether = 1):** slower than 1

Solubility in Water: appreciable Appearance and Odor: clear, colorless liquid, solvent odor

pH (concentrate) = 11.8

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: none (Tag Closed Cup) Flammable Limits: LEL = N/A UEL = N/A Extinguishing Media: Carbon dioxide, dry chemical or foam (water spray to cool closed containers)

Special Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Unusual Fire and Explosion Hazards: None known to Hillyard.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** N/A

Incompatibility (Materials to Avoid): Keep away from strong oxidizers such as permanganate or strong oxides. **Hazardous Decomposition Products or Byproducts:** As with any organic material, combustion will produce carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will not occur Conditions to Avoid: N/A

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? Yes Skin? Yes Ingestion? Yes **HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. According to Primary Skin Irritation Test (FHSA), product concentrate is moderate irritant to skin at 24 hours. Eye Irritation Test (FHSA) = corrosive. When tested as specified this product was not considered to be a UN/DOT corrosive at 4 hours. Acute oral limit test showed the product was orally toxic at 5g./kg. It may be harmful or fatal if swallowed. Inhalation of fine fog mist can cause irritation to mucous membranes. Fine fog mist application is not recommended. 2.None known to manufacturer.

^{*}This product contains the following chemicals subject to the reporting requirements of SARA Title III, Sec. 313, and 40 CFR Part 372: 2-Butoxyethanol.

SECTION VI -- HEALTH HAZARD DATA continued

Chemical listed as Carcinogen or Potential Carcinogen:

National Toxicology Program = No I.A.R.C. Monographs = No OSHA = No

Signs and Symptoms of Exposure: Butyl cellosolve is readily absorbed through the skin in toxic amounts. Inhalation of high concentrations of vapors results in respiratory and eye irritation, narcosis, headache, nausea, dizziness, hematuria and damage to liver and kidneys.

Medical Conditions Generally Aggravated by Exposure: Repeated overexposure may result in damage to the blood. **Emergency and First Aid Procedures:** Inhalation: Remove person to fresh air. If breathing difficulty persists or occurs later, call physician. In case of contact, immediately flush eyes or skin with plenty of water for 15 minutes. Get prompt medical attention. Remove and wash all contaminated clothing before reuse. If swallowed, immediately give large amounts of water and IMMEDIATELY CALL A PHYSICIAN, hospital emergency room or poison control center.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb large spills with floor dry material (see disposal below). Small spills: Flush with water and pick up with mop or wet vacuum.

Waste Disposal Method: Dispose of in accordance with state or local regulations. Do not dispose of in storm drains or streams; monoethanolamine is toxic to fish.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Since empty packages retain product residue, follow label warning even after package is empty. Do not store above 120°F. Spray mist may produce respiratory irritation or damage and increase susceptibility to respiratory illness. USE WITH ADEQUATE VENTILATION. Avoid breathing vapors or spray mist. Open windows and doors, use exhaust fans or other means to insure fresh air entry during application and drying. Refer to OSHA Standard 29 CFR 1910.94 for technical guidelines on keeping air contamination below acceptable exposure limits. Do not get on skin, in eyes or on clothing.

SECTION VIII -- CONTROL MEASURES

Respiratory Protection (Specify Type): Wear appropriate, properly fitted respirator (NIOSH or MSHA approved unless air monitoring demonstrates vapor or mist levels are below applicable limits.

Ventilation: at least 10 air changes per hour recommended

Local Exhaust = recommended Mechanical (General) = recommended Special = N/A Other = N/A

Protective Gloves: impervious rubber gloves recommended Eye Protection: chemical safety goggles

Other Protective Clothing or Equipment: protective clothing

Work / Hygienic Practices: Wash contaminated clothing before reuse (including shoes).

SECTION IX - TRANSPORTATION INFORMATION

Applicable regulations: DOT = No; IMCO = No; IATA = No

Proper shipping name: Cleaning compound

UN No.: not applicable Limited Qty.: not applicable Hazard Class: not applicable

Labels required: <u>not required</u> **DOT Exception:** <u>not applicable</u>

EPA Hazardous waste/number code: not listed

Hazardous waste characteristics:

Ignitability = not applicable; **Corrosivity** = not applicable; **Reactivity** = not applicable

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