NFPA RATING: Health =3Flammability =0Reactivity =0HMIS RATING: Health =3Flammability =0Reactivity =0
SECTION I IDENTITY AND MANUFACTURER'S INFORMATION (0734A) Manufacturer's Name: HILLYARD INDUSTRIES Address: 302 North Fourth Street Joseph, MO 64501 Date Prepared: July 6, 2001 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: Common Name(s) CAS# OSHA PEL ACGIH TLV RECOMMENDED % Sodium Hydroxide* (1) 1310-73-2 2 mg/M ³ 2 mg/M ³ N.A. 3-8% Diethylene Glycol Monobutyl Ether* 112-34-5 N.A. N.A. 2-5% Water 7732-18-5 none none N.A. Anionic/Nonionic Surfactant unknown not established N.A. *This product contains the following chemicals subject to the reporting requirements of SARA Title III, Section 313, and 40 CFR Part 372: Sodium Hydroxide and Diethylene Glycol Monobutyl Ether. (1) Regulated by OSHA, CT, FL, IL, LA, MA, NJ, NY, PA, and RI. VOC (less water) = 216 g./l.; VOS with water = 8.06 lbs./gal.
SECTION III PHYSICAL / CHEMICAL CHARACTERISTICSBoiling Point:212.8°FSpecific Gravity (H2O = 1): 25°C =1.0& 39°C =1.0Vapor Pressure (mm Hg.):17.5Percent Volatile by Volume (%):91.6%Vapor Density (AIR = 1):0.6Evaporation Rate (ethyl ether = 1):slower than 1Solubility in Water:completeAppearance and Odor:Clear, yellow liquid non-objectionable odorpH (concentrate) =13.3
SECTION IV FIRE AND EXPLOSION HAZARD DATA Flash point: None to Boiling (Tag Closed Cup) Flammable Limits: LEL = N.A. Extinguishing Media: Not applicable. Special Fire Fighting Procedures: Hot sodium hydroxide is corrosive. Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Unusual Fire and Explosion Hazards: Product contains sodium hydroxide and considered corrosive. Sodium hydroxide will react with aluminum to form hydrogen gas.
SECTION V PHYSICAL HAZARDS Stability: Stable Conditions to Avoid: None known to manufacturer Incompatibility (Materials to Avoid): Avoid contact with all acids, leather, wool, aluminum, copper, tin, lead - zinc and their alloys. Hazardous Decomposition Products or Byproducts: None known to Hillyard Industries Hazardous Polymerization: Will not occur Conditions to Avoid: N.A.
 SECTION VI HEALTH HAZARD DATA Routes of entry: Inhalation? by mist Skin? yes Ingestion? yes HEALTH HAZARDS (1. Acute and 2. Chronic) According to Primary Skin Irritation Test (FHSA), product concentrate is corrosive; Eye Irritation Test (FHSA) = corrosive. When tested as specified this product was considered to be a UN/DOT corrosive at 60 minutes. Prolonged skin contact may cause skin burns. Spray mist may irritate nose and throat. Harmful if swallowed. Chronic: No chronic data is presently available. Chemical listed as Carcinogen or Potential Carcinogen: National Toxicology Program = No I.A.R.C. Monographs = No OSHA = No This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater than or equal to 0.1%.

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SECTION VI -- HEALTH HAZARD DATA cont.

Signs and Symptoms of Exposure: Contact = Irritation or burning of nose, throat, eyes or skin.

Medical Conditions Generally Aggravated by Exposure: None known to manufacturer.

Emergency and First Aid Procedures: In case of contact, immediately flush eyes (holding eye lids open) or skin with plenty of water for 15 minutes while removing contaminated clothing and shoes. GET MEDICAL ATTENTION IMMEDIATELY. Wash contaminated clothing and shoes thoroughly before reuse. If swallowed, DO NOT INDUCE VOMITING; immediately give large of water; never give anything by mouth to an unconscious person. GET MEDICAL ATTENTION IMMEDIATELY. Inhalation, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. GET MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Wear protective clothing; absorb with floor dry or similar inert material. Sweep or scrape up and put in appropriate container. Rinse spill area thoroughly with water. Avoid contamination of storm drains, sewers or other unauthorized treatment drainage systems and natural waterways.

Waste Disposal Method: Disposal is regulated under the Resource Conservation and Recovery Act (40 CFR 261.22) as a corrosive waste. Regulated quantities should be neutralized by a permitted facility in accordance with applicable local, state, and federal regulations.

Precautions To Be Taken In Handling And Storing: Product residue may remain on or in empty containers. All precautions for handling the product must be used in handling the empty container or residue. Container disposal: Triple rinse (or equivalent) then offer clean, dry container for recycling or reconditioning. Waste from normal use may be sewered to a public-owned treatment works in compliance with applicable federal, state and local requirements.

Other Precautions: Avoid breathing fine fog spray mist. Use with adequate ventilation. 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 applicable exposure limits. Avoid contact with skin, eyes and clothing. Do not take internally.

SECTION VIII -- CONTROL MEASURES

Respiratory Protection (Specify Type): Not usually necessary. Heavy spray application may require NIOSH approved respirator. **Ventilation:** At least 10 air exchanges per hour suggested.

Local Exhaust = RecommendedMechanical (General) = RecommendedSpecial = N.A.Other = N.A.Protective Gloves: Impervious gloves (rubber)Eye Protection: Chemical splash goggles or face shield.Other Protective Clothing or Equipment:Rubber apron or where there is a danger of getting on feet use rubber boots.Work / Hygienic Practices:Wash thoroughly after handling.Upon contact remove contaminated clothing; wash before reuse.

SECTION IX - TRANSPORTATION INFORMATION

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

(Quart boxes) = Consumer Commodity ORM-D

Package Marking = <u>Consumer Commodity ORM-D</u> Label = <u>None</u> Hazard Class = <u>not applicable</u> Package Group = \underline{II}

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

(Gallon boxes) = <u>Compound, Cleaning Liquid (Sodium hydroxide)</u>, 8, NA1760, PG II

Package Marking = <u>Compound</u>, <u>Cleaning Liquid</u> (Sodium hydroxide), <u>NA1760</u>

Package Label = $\underline{\text{Corrosive}}$ Hazard Class = $\underline{8}$ Package Group = $\underline{\text{II}}$

EPA Hazardous waste number / code: not listed

Hazardous waste characteristics: Ignitability = not applicable; Corrosivity = yes; Reactivity = not applicable

DISCLAIMER OF WARRANTIES

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OF ANY NATURE ARE MADE WITH RESPECT TO THE PRODUCT(S) OR INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET.

The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate.

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