MATERIAL SAFETY DATA SHEET

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

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (0433B)

Product Name: ALPINE DISINFECTANT Manufacturer's Name: HILLYARD INDUSTRIES

Date Prepared: September 19, 2000 302 North Fourth Street Address:

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

Emergency Telephone No.: (800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure or Other information calls: (816) 233-1321 (Ext. 8285)

accident involving chemicals.)

http://www.hillyard.com

SECTION II - INGREDIENTS/IDENTITY INFORMATION

Components (Specific Chemical Identity: Common Name(s) Octyl Decyl Dimethyl Ammonium Chloride Dioctyl Dimethyl Ammonium Chloride Didecyl Dimethyl Ammonium Chloride	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED	%
OR Di-N-Alkyl (C8/C ₁₀ -50%; C ₁₀ /C ₁₀ -30%; C ₈ /C ₈ -	68424-95-3	not established	not established	N/A	1.08
20%) dimethyl ammonium chloride Alkyl (C14, 50%; C12, 40%; C16, 10%) Dimethyl	68424-85-1	not established	not established	N/A	0.72
Benzyl Ammonium Chloride Ethanol	64-17-5	1000 ppm	1 00 0ppm	N/A	less than 2%
Sodium metasilicate Water Tetrasodium ethylene diamine tetraacetate Nonylphenol Ethoxylate	6434-92-0 7732-18-5 64-02-8 9016-45-9	not established none not established not established	not established none not established not established	2 mg/m ³ N/A N/A N/A	0.2 - 0.7

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

1.01 Specific Gravity ($H_2O = 1$): 25°C = 1.01 738 mm 202°F Boiling Point:

Percent Volatile by Volume (%): 92.6 17.6 Vapor Pressure (mm Hg.):

Evaporation Rate (cthyl ether = 1): slower than 1 less than 1 Vapor Density (AIR = 1):

Appearance and Odor: green liquid; alpine odor appreciable Solubility in Water:

pH of concentrate: 12.4 -13.4

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flammable Limits: LEL = N/A UEL = N/A Flash point: None to boiling (T.C.C.)

Water, dry chemical, carbon dioxide, foam Extinguishing Media:

Special Fire Fighting Procedures: Wear MSHA/NIOSH approved self-contained breathing apparatus. Cool fire-exposed

containers with water spray.

Unusual Fire and Explosion Hazards: Products of combustion are toxic.

SECTION V - PHYSICAL HAZARDS

Conditions to Avoid: Do not mix with anionic cleaners. Stability: Stable

Incompatibility (Materials to Avoid): oxidizing materials

Hazardous Decomposition Products or Byproducts: Carbon dioxide, carbon monoxide, ammonia, nitrous oxides,

hydrogen chlorides

Conditions to Avoid: none known Hazardous Polymerization: Will not occur

SECTION VI – HEALTH HAZARD DATA

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

1. Concentrate is corrosive to all body tissue with which it comes in contact.

2. Prolonged and repeated exposure to the skin may produce dermatitis. Fine fog mist application is not recommended.

SECTION VI - HEALTH HAZARD DATA cont.

Chemical listed as Carcinogen or Potential Carcinogen:

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

Signs and Symptoms of Exposure: Direct eye contact can cause severe damage; repeated skin contact can cause severe irritation; concentrate is corrosive to eyes and skin. Ingestion of concentrate: immediate burning pain in mouth, throat, abdomen and severe swelling of larynx, skeletal muscle paralysis and affecting the ability to breathe.

Medical Conditions Generally Aggravated by Exposure: Skin problems such as industrial dermantis.

Emergency and First Aid Procedures: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes call a physician. Remove and wash contaminated clothing before reuse. If swallowed, drink promptly a large quantity of egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately. Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage,

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Dike and contain spill with inert material (sand, earth, etc.) and transfer liquid and solid separately to containers for recovery or disposal. Small spills: Flush with water and pick up with wet vac or mop when on inside flooring. The pH of the concentrate is 12.4-13.4, thus concentrate is defined as corrosive per EPA Hazardous Waste Classification; when diluted with normal tap water for use to pH below 12.5 is not corrosive per EPA definition but still a pesticide waste.

Waste Disposal Method: Pesticide wastes are acutely hazardous. Do not contaminate water, food or feed by storage or disposal. If these wastes cannot be disposed of by use according to label instructions contact you state pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest BPA Office for guidance.

Precautions To Be Taken In Handling And Storing: Do not store on side. Avoid creasing or impacting of side walls of package. Other Precautions: Container disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke. This product contains no reportable quantities of toxic chemicals subject to reporting requirements of Section 313 of SARA Title III Emergency Planning and Community Right to Know Act of 1986 and 40 CFR Part 372.

SECTION VIII - CONTROL MEASURES

Respiratory Protection (Specify Type): None normally required. If exposed to fine mist droplets of less than 15 microns, a NIOSH/MSHA approved respirator should be worn.

Ventilation: 10 air changes per hour recommended

Other = N/A recommended Special = Mechanical (General) = Local Exhaust = N/A chemical goggles or face shield with concentrate rubber or neoprene with concentrate Eve Protection: Protective Gloves:

Other Protective Clothing or Equipment: None

Work / Hygienic Practices: Wash thoroughly after handling.

SECTION IX - TRANSPORTATION INFORMATION

Applicable regulations: 49 CFR = \underline{no} ; IMCO = \underline{no} ; IATA = \underline{no}

Proper shipping name: Cleaning Compound

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

DOT Exception: not applicable Labels required: not required

EPA Hazardous waste number/code: not listed

Hazardous waste characteristics:

Ignitability = not applicable; Corrosivity = yes; Reactivity = not applicable

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