

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 3 Flammability = 0 Reactivity = 0
HMIS RATING: Health = 3 Flammability = 0 Reactivity = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION (0533A)**Manufacturer's Name:** HILLYARD INDUSTRIES**Product Name:** H-101**Address:** 302 North Fourth Street
St. Joseph, MO 64501**Date Prepared:** February 8, 1995**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	OTHER LIMITS RECOMMENDED	%
Octyl Decyl Dimethyl Ammonium Chloride					
Dioctyl Dimethyl Ammonium Chloride					
Didecyl Dimethyl Ammonium Chloride or Di-N-Alkyl (C ₈ /C ₁₀ -50%; C ₁₀ -30%; C ₈ /C ₈ -20%) dimethyl ammonium chloride	68424-95-3	not established	not established	N/A	4.5
Alkyl (C ₁₄ , 50%; C ₁₂ , 40%; C ₁₆ , 10%) Dimethyl Benzyl Ammonium Chloride	68424-85-1	not established	not established	N/A	3.0
Ethyl alcohol	64-17-5	1000 ppm	1000 ppm	N/A	1-2

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corr. 200°F **Specific Gravity (H₂O = 1):** 25°C = 0.996 & 39°C = 0.989
Vapor Pressure (mm Hg.): 17.6 **Percent Volatile by Volume (%):** average 91.36
Vapor Density (AIR = 1): 0.6 **Evaporation Rate (ethyl ether = 1):** less than 1
Solubility in Water: appreciable **Appearance and Odor:** Clear, colorless liquid; non-objectionable odor
pH of concentrate: 5.0 -7.0

SECTION IV – FIRE AND EXPLOSION HAZARD DATA**Flash point:** none to boiling (Tag Closed Cup) **Flammable Limits:** LEL = N/A UEL = N/A**Extinguishing Media:** Water, dry chemical, CO₂, foam**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****Stability:** Stable **Conditions to Avoid:** Do not mix with anionic cleaners.**Incompatibility (Materials to Avoid):** Oxidizing materials**Hazardous Decomposition Products or Byproducts:** Carbon dioxide, carbon monoxide, ammonia, nitrous oxides, hydrogen chloride**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** None known**SECTION VI – HEALTH HAZARD DATA****Routes of entry:** Inhalation? Yes Skin? Yes Ingestion? Yes**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. Inhalation of fine fog mist can cause irritation of the mucous membranes; use large droplet sprayer and adequate ventilation when spraying or proper respiratory protection.

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%.

SECTION VI – HEALTH HAZARD DATA continued

Signs and Symptoms of Exposure: Direct eye contact can cause severe damage; repeated skin contact can cause severe skin 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 dermatitis.

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.

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 your state pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional 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): Not required

Ventilation: 10 air changes per hour recommended

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

Protective Gloves: Rubber or neoprene with concentrate

Eye Protection: Chemical goggles or face shield with concentrate

Other Protective Clothing or Equipment: None

Work / Hygienic Practices: Wash thoroughly after handling

SECTION IX – TRANSPORTATION INFORMATION

Applicable regulations: DOT = Yes; IMCO = Yes; IATA = Yes

Proper shipping name (Gallon Boxes) for U.S. Highway: Consumer Commodity ORM-D

Proper shipping name (5 & 55 Gallon Drums) for U.S. Highway: Compounds, cleaning liquid, (Dialkyl dimethyl ammonium chloride, N-alkyl dimethyl benzyl ammonium chloride), 8, NA 1760, PG III

UN No.: UN1760 **Limited Qty.:** not applicable **Hazard Class:** 8

Label required: Not required on gallon boxes by highway; 5 & 55 gallon drum = Corrosive Label

DOT Exception: Not applicable

EPA Hazardous waste/number code: Not listed

Hazardous waste characteristics:

Ignitability = Not applicable; **Corrosivity =** Not applicable; **Reactivity =** Not applicable

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