

MATERIAL SAFETY DATA SHEET

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

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

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION

Distributor's Name: HILLYARD INDUSTRIES

Product Name: RE-JUV-NAL HBV

Address: 302 North Fourth Street
St. Joseph, MO 64501

Date Prepared: October 10, 1997

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	%
Alkyldimethylbenzyl Ammonium Chloride	68391-01-5	not established	not established	N/A	2.25
Alkyldimethylethylbenzyl Ammonium Chloride	68956-79-6	not established	not established	N/A	2.25
Sodium Carbonate	497-19-8	not established	not established	N/A	1-5
Nonionic Surfactant	9016-45-9	not established	not established	N/A	1-5
Water	7732-18-5	none	none	none	---

VOC = less than 0.01%

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: approximately 212°F

Specific Gravity (H₂O = 1): 225°C = 1.35 & 39°C = 1.35

Vapor Pressure (mm Hg.): not established

Percent Volatile by Volume (%): >85%

Vapor Density (AIR = 1): not established

Evaporation Rate (ethyl ether = 1): slower than 1

Solubility in Water : complete

Appearance and Odor: Clear liquid, light floral fragrance

pH = 11.7

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

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

Extinguishing Media: Water, CO₂. Foam or media suitable for surrounding fire.

Special Fire Fighting Procedures: Standard fire fighting procedures may be followed, including full protective gear, NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: None known.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** None known to manufacturer.

Incompatibility (Materials to Avoid): Do not mix with other chemicals.

Hazardous Decomposition Products or Byproducts: Thermal decomposition on burning may produce toxic vapors or gases.

Hazardous Polymerization: Will not Occur **Conditions to Avoid:** None known.

SECTION VI -- HEALTH HAZARD DATA

Routes of entry: Inhalation? by mist Skin? yes Ingestion? yes

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Harmful if swallowed. Eye and skin irritant.

2. None known.

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

This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater than or equal to 0.1%.

Signs and Symptoms of Exposure: Irritation or burning sensation.

Medical Conditions Generally Aggravated by Exposure: May aggravate skin disorders or respiratory ailments.

Emergency and First Aid Procedures: EYE CONTACT: Flush Immediately with water for 15 minutes. Get medical attention.

SKIN CONTACT: Flush with water for 15 minutes. Remove and wash contaminated clothing. **INGESTION:** Rinse mouth with water. Then drink 1-2 glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Wear appropriate protective equipment. If possible, contain spill and collect in approved container. Rinse affected area thoroughly with water. Keep product out of sewers or waterways. Hold for disposal.

Waste Disposal Method:

Dispose of in accordance with local, state and federal regulations. If possible, triple rinse container, and recycle.

Precautions To Be Taken In Handling And Storing:

Avoid contact with skin or eyes. Avoid breathing vapor, spray or mist. Store in original container, in cool dry place with adequate ventilation. Keep out of reach of children. Keep container tightly closed when not in use.

Other Precautions: Use only according to label directions. If unsure about safe use, contact your supervisor immediately.

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. 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 expected to be necessary under normal conditions of use. Where exposure cannot be adequately controlled by general or local ventilation, use appropriate respiratory protection to prevent over exposure. An approved dust/mist respirator would be recommended.

Ventilation: Local Exhaust =As necessary **Mechanical (General) =** Adequate **Special =** N.A. **Other =** N.A.

Protective Gloves: Water impervious gloves (Latex, Neoprene). **Eye Protection:** Chemical Resistant Goggles or Face Shield.

Other Protective Clothing or Equipment: Eye wash recommended.

Work / Hygienic Practices: Follow OSHA mandated procedures. Never eat or smoke while working with chemicals. Good housekeeping practices apply. 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 Gallon Drums) for U.S. Highway: Corrosive Liquid N.O.S., (N-Alkyldimethylbenzyl Ammonium Chloride), 8, UN 1760, PG III

UN No.: UN1760

Limited Qty.: not applicable

Hazard Class: 8

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

DOT Exception: Not applicable

EPA Hazardous waste/number code: Not listed

EPA Hazardous waste characteristics: Ignitability = Not applicable; Corrosivity = Not applicable; Reactivity = Not applicable

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