

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 (502N-48E)

Manufacturer's Name: HILLYARD INDUSTRIES

Product Name: SHOWER FOAM

Address: 302 North Fourth Street

Date Prepared: March 5, 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	OTHER LIMITS	
				RECOMMENDED	%
Phosphoric acid * (1)	7664-38-2	1 mg/M ³	1 mg/M ³	N/A	13-17
Water	7732-18-5	none	none	N/A	---
Lauryl dimethyl amine oxide	1643-20-5	not est.	not est.	N/A	---
Coco amino propyl dimethyl betaine	61789-40-0	not est.	not est.	N/A	---

*This product contains the following chemicals subject to the reporting requirements of SARA Title III, Sec. 313, and 40 CFR Part 372: Phosphoric acid.

(1) Regulated by OSHA and the following states: FL, IL, LA, MA, NJ, NY, PA, RI

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corr.	208°F	Specific Gravity (H ₂ O = 1): 25°C = 1.08	& 39°C = 1.07
Vapor Pressure (mm Hg.):	17.5	Percent Volatile by Volume (%):	73
Vapor Density (AIR = 1):	0.6	Evaporation Rate (ethyl ether = 1):	slower than 1
Solubility in Water :	appreciable	Appearance and Odor:	blue-green liquid; wintergreen odor
pH (conc.)	1.52		

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: none (Tag Closed Cup) Flammable Limits: LEL = N/A UEL = N/A

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

Special Fire Fighting Procedures: Hot phosphoric acid is corrosive. Wear protective clothing to avoid contact with skin or eyes.

Unusual Fire and Explosion Hazards: May generate hydrogen gas in contact with some metals.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: None known to Hillyard

Incompatibility (Materials to Avoid): Strong oxidizing agents, ammonia or bleaches; strong alkalis and cyanides, and some metals.

Hazardous Decomposition Products or Byproducts: Hydrogen gas from contact with some metals

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. Concentrate was not a primary skin irritant when tested per Federal Hazardous Substance Act. Concentrate was a primary eye irritant per the Federal Hazardous Substance Act; all test subjects showed moderate to severe discharge with moistening of the lids and hairs in a considerable area around the eye. At a dose of 5 g./Kg. No deaths were observed. Also was not acutely toxic following a 1 hour exposure at nominal concentration of 55.74 mg./L. (actual concentration of 15.21 mg./L. Spray mist of concentrate may irritate nose and throat. 2. None known to Hillyard.

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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: Concentrate can cause severe eye irritation. Harmful if swallowed. Concentrate burns mouth and lips after ingestion; sour taste of acid, severe gastrointestinal irritation.

Medical Conditions Generally Aggravated by Exposure: N/A

Emergency and First Aid Procedures: If swallowed, immediately give large amounts of water and call a physician, hospital emergency room or poison control center. If excess inhaled, remove to fresh air. In case of contact, immediately flush eyes or skin with plenty of water for 15 minutes; remove contact lenses and flush eyes again with water. For eyes, CALL A PHYSICIAN. If skin irritation persists, get medical attention. Remove and wash all contaminated clothing before reuse.

SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Small spills: Pick up with noncombustible absorbent. Large spills: Dike far ahead of liquid spill. Avoid contact with skin and eyes. Rinse affected area thoroughly with water.

Waste Disposal Method: Disposal of concentrated product is regulated under RCRA as corrosive waste (pH less than 2). Disposal of regulated quantities should be neutralized at a permitted facility in accordance with federal, state and local regulations. Waste from normal product use may be sewerred to a public-owned treatment works in compliance with pretreatment requirements.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Avoid excessive temperature; i.e., welding, flame cutting and brazing.

Other Precautions: Contact lenses should not be worn when working with this material.

SECTION VIII -- CONTROL MEASURES

Respiratory Protection (Specify Type): Self-contained breathing apparatus in areas where high mist vapor concentration cannot be controlled by ventilation.

Ventilation:

Local Exhaust = If required to maintain TLV Mechanical (General) = Normal ventilation sufficient Special = N/A Other = N/A

Protective Gloves: Acid-resistant rubber **Eye Protection:** Chemical safety goggles (conc.)

Other Protective Clothing or Equipment: Protective clothing or rubber apron where contact with conc. is a concern.

Work / Hygienic Practices: Corrosive - do not get in eyes, on skin or clothing. Avoid prolonged breathing of vapors.

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: not required DOT Exception: not applicable

EPA Hazardous waste/number code: not listed

Hazardous waste characteristics:

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

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