

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**

#HJL011

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

Date Prepared: March 5, 2001

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.

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 sewered 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

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.

THE BUYER OR USER ASSUMES ALL RISKS ASSOCIATED WITH THE USE, MISUSE OR DISPOSAL OF THIS PRODUCT. THE BUYER OR USER IS RESPONSIBLE TO COMPLY WITH ALL FEDERAL, STATE OR LOCAL REGULATIONS CONCERNING THE USE, MISUSE OR DISPOSAL OF THESE PRODUCTS.