

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 3 Flammability = 0 Reactivity = 0
 HMIS RATING: Health = / 3 Flammability = 1 Reactivity = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION

(515N-86A)

Distributor's Name: HILLYARD INDUSTRIES

Product Name: C2 SHOWER ROOM CLEANER

Address: 302 North Fourth Street

Date Prepared: August 18, 2005

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 I – 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	3 mg/m ³	5 - 10
Oxalic acid (2)	144-62-7	1 mg./m ³	1 mg./m ³	2 mg/m ³	1 - 3
Water	7732-18-5	none	none	N.A.	---
Nonyl phenol ethoxylate	9016-45-9	not established	not established	not established	<2
Di-N-alkyl (C ₈ /C ₁₀ -50%; C ₁₀ /C ₁₀ -30%, C ₈ /C ₈ -20%) dimethylammonium chloride	68424-95-3	not established	not established	N.A.	1.5
N-alkyl (C ₁₄ -50%; C ₁₂ -40%, C ₁₆ -10%) dimethyl benzylammonium chloride	68424-85-1	not established	not established	N.A.	1.0

*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: CT, FL, IL, LA, MA, NJ, NY, PA, and RI. (2) Regulated by OSHA and the following states: CA, FL, IL, PA, TX.

VOC of concentrate = less than 0.01%

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 208°F

Specific Gravity (H₂O = 1): 25°C = 1.05 & 39°C = 1.05

Vapor Pressure (mm Hg.): not established

Percent Volatile by Volume (%): 86.9%

Vapor Density (AIR = 1): not established

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

Solubility in Water: complete

Appearance and Odor: blue/green liquid, mint odor

pH = 1.18

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, dry chemical or foam.

Special Fire Fighting Procedures: Must wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing. 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: None known to manufacturer.

Incompatibility (Materials to Avoid): None known by manufacturer.

Hazardous Decomposition Products or Byproducts: Thermal decomposition may produce toxic fumes of hydrogen chloride and oxides of carbon, nitrogen and phosphorous.

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. May cause permanent damage.

2. None known.

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 Overexposure: No information found on this formula. Based upon information available for similar products, it is anticipated that this material will be corrosive to the skin and eyes upon direct or prolonged contact. Solvent vapors or mists or products can cause irritation of mucous membranes. Ingestion can cause immediate burning pain in the mouth, throat, and abdomen; severe swelling of the larynx; skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions. May be fatal.

Medical Conditions Generally Aggravated by Exposure: No effects known to manufacturer.

Emergency and First Aid Procedures: **Eyes:** Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. If physician not available, flush for additional 15 minutes. Get immediate medical attention. **Skin:** Wash with large amounts of running water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse. **Ingestion:** If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting occurs, give fluids again. Have physician determine if patient's condition allows for induction of vomiting or evacuation of the stomach. Do not give anything by mouth to a convulsing or unconscious person. Get immediate medical attention. **Inhalation:** Remove from area to fresh air. If not breathing, clear airway and start mouth-to-mouth artificial respiration or use a bag-mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Danger! Corrosive material. Floors may become slippery. Wear appropriate protective equipment and MSHA/NIOSH approved respirator where mist or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred). Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

Waste Disposal Method: Disposal in compliance with all federal, state and local laws and regulations. Incineration is the preferred method.

Precautions To Be Taken In Handling And Storing: Store at temperatures below 140°F. Keep containers closed until used. Do not contaminate drinking water, food or feed by storage or disposal.

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

SECTION VIII – CONTROL MEASURES

Respiratory Protection (Specify Type): In processes where TLV may be exceeded, or mists and/or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices. Where mist or vapors are generated by the process, a NIOSH/OSHA jointly approved respirator is advised in the absence of proper environmental controls.

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

Protective Gloves: Rubber or neoprene, when needed, to prevent skin contact. **Eye Protection:** Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

Other Protective Clothing or Equipment: Eye wash; safety shower; protective clothing (long sleeves, coveralls or other, as appropriate), when needed to prevent skin contact.

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

DOT SHIPPING DESCRIPTION ON BILL OF LADING:

(Gallon boxes) = Consumer Commodity ORM-D

(5 Gallon) = Disinfectants, corrosive liquid, n.o.s. (Phosphoric Acid, Oxalic acid), 8, UN1903, III

IMCO and IATA SHIPPING DESCRIPTION ON BILL OF LADING:

Gallon boxes and 5 Gallon = Disinfectants, corrosive liquid, n.o.s. (Phosphoric Acid, Oxalic acid), 8, UN1903, III

Package Marking = Disinfectants, corrosive liquid, n.o.s. (Phosphoric Acid, Oxalic acid), UN1903

Package Label = Corrosive Hazard Class = 8 Package Group = III

EPA Hazardous waste number/code: not listed

Hazardous waste characteristics: Ignitability = not applicable; Corrosivity = applicable; Reactivity = not applicable

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