

## 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 (1142A)

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: EXTRA STRENGTH CSP CLEANER  
 Address: 302 North Fourth Street Date Prepared: April 28, 2008  
 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 <sup>3</sup>	1 mg/M <sup>3</sup>	N/A	15-20
Butyl cellosolve (2-Butoxyethanol) * (2)	111-76-2	50 ppm	20 ppm	N/A	1-3
Water	7732-18-5	none	none	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 and 2-Butoxyethanol.

(1) Regulated by OSHA, CT, FL, IL, LA, MA, NJ, NY, PA, RI

(2) Regulated by OSHA, FL, IL, LA, MA, NJ, PA, RI

VOC = 13 g/l.; VOC less water = 102 g/l.

## SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corr. 195°F Specific Gravity (H<sub>2</sub>O = 1): 25°C = 1.09 & 39°C = 1.09  
 Vapor Pressure (mm Hg.): 17.5 Percent Volatile by Volume (%): avg. 83  
 Vapor Density (AIR = 1): 0.6 Evaporation Rate (ethyl ether = 1): slower than 1

Solubility in Water: appreciable Appearance and Odor: colorless, slightly hazy, heavy-bodied liquid; lemon odor

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash point: none (P.M.C.C.) Flammable Limits: LEL = N/A UEL = N/A

Extinguishing Media: Carbon dioxide, foam or dry chemical

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

Unusual Fire and Explosion Hazards: Keep away from heat, sparks and open flames. May generate hydrogen gas in contact with some metals.

## SECTION V - PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: None known

Incompatibility (Materials to Avoid): Corrodes some metals and alloys; cyanides and strong alkalis.

Hazardous Decomposition Products or Byproducts: Hydrogen gas from contact with some metals (contains some corrosion inhibitors and is not expected to cause any problems with sewage pipes).

Hazardous Polymerization: Will not occur Conditions to Avoid: Not pertinent

## SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation? By mist Skin? Yes Ingestion? Yes

## HEALTH HAZARDS (1. Acute and 2. Chronic)

1. Short-term exposure to the acid or its solutions may cause eye and skin burns. Spray mist may irritate nose and throat.

2. Chronic exposure may produce severe skin and eye burns.

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 cont.**

**Signs and Symptoms of Exposure:** Contact: burns of eyes, skin and on mouth and lips after ingestion, with sour taste of acid; severe gastrointestinal irritation, nausea, vomiting, bloody diarrhea.

**Medical Conditions Generally Aggravated by Exposure:** Not applicable

**Emergency and First Aid Procedures:** Ingestion: 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:** Collect spilled acid in most convenient and safe manner for reclamation. Absorb liquid in vermiculite, dry sand or similar material and dispose of in a secured sanitary landfill according to state, federal and local regulations.

**Waste Disposal Method:** Since pH is less than 1, material is classified as corrosive material per EPA definition of hazardous waste regarding pH. Dispose of concentrated material in accordance with local pollution regulations. Do not put in storm drains.

**Precautions To Be Taken In Handling And Storing:** Keep container closed when not in use.

**Other Precautions:** Contact lenses should not be worn when working with this chemical. Use with adequate ventilation. Avoid breathing vapors or spray mist. Open windows and doors, use exhaust fans or other means to insure fresh air entry during application and drying. Refer to OSHA Standard 29 CFR 1910.94 for technical guidelines on keeping air contamination below acceptable exposure limits.

**SECTION VIII – CONTROL MEASURES**

**Respiratory Protection (Specify Type):** NIOSH approved self-contained breathing apparatus in areas with high mist concentrations.

**Ventilation:**

**Local Exhaust =** If required to maintain TLV      **Mechanical (General) =** Acceptable      **Special =** N/A      **Other =** N/A

**Protective Gloves:** Acid-resistant rubber      **Eye**      Chemical safety goggles

**Protection:**

**Other Protective Clothing or Equipment:** Acid-resistant aprons, or suits as required; rubber footwear where applicable.

**Work / Hygienic Practices:** Wash thoroughly from skin.

**SECTION IX – TRANSPORTATION INFORMATION**

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

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

**Proper shipping name (55 Gallon Drums) for U.S. Highway:** Compounds, cleaning liquid, (Phosphoric acid), 8, NA 1760, PG III

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

**Label required:** not required on quart and gallon boxes by highway; 55 gallon drum = Corrosive Label

**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**

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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.

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