MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 2  Flammability = 0  Reactivity = 0
HMIS RATING: Health = 2  Flammability = 0  Physical Hazard = 0

SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION  (538N-66A)
Manufacturer's Name: HILLYARD INDUSTRIES  Product Name: CITRIC EXTRA STRENGTH CSP CLEANER
Address: 302 North Fourth Street  Date Prepared: May 20, 2011 (version 2)
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
Citric acid  77-92-9  N/E  N/E  N/A  5-10
Water  7732-18-5  none  none  N/A  ---
1-Butoxy-2-propanol  5131-66-8  N/E  N/E  N/A  ---
VOS = 0.12 lbs./gal. with water.; VOC less water = 210 g/1.
N/A= Not Applicable  N/E= Not Established

SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS
Boiling Point: corr. 207°F  Specific Gravity (H2O = 1): 25°C = 1.03  #Density = 8.57 lbs/gl
Vapor Pressure (mm Hg.): 17.5  Percent Volatile by Weight (%): 91.5 – 92.5
Vapor Density (AIR = 1): 0.7  Evaporation Rate (ethyl ether = 1): slower than 1
Solubility in Water: complete  Appearance and Odor: Opaque, light pink liquid, lemon odor
pH (concentrate) = 2.1

SECTION IV – FIRE AND EXPLOSION HAZARD DATA
Flash point: none (Tag Closed Cup)  Flammable Limits: LEL = N/A  UEL = N/A
Extinguishing Media: Carbon dioxide, foam or dry chemical
Special Fire Fighting Procedures: Wear protective clothing to avoid contact with skin or eyes.
Unusual Fire and Explosion Hazards: None known to Hillyard.

SECTION V – PHYSICAL HAZARDS
Stability: Stable  Conditions to Avoid: None known to Hillyard.
Incompatibility (Materials to Avoid): Alkalis, strong oxidizing agents. Mixing with strong caustic can create heat.
Hazardous Decomposition Products or Byproducts: Combustion can produce carbon dioxide and/or carbon monoxide.
Hazardous Polymerization: Will not occur  Conditions to Avoid: None known to Hillyard

SECTION VI – HEALTH HAZARD DATA
Routes of entry: Inhalation? No  Skin? Yes  Ingestion? No
HEALTH HAZARDS (1. Acute and 2. Chronic)
1. Contact with causes eye burns and moderate skin irritation.
2. None known to Hillyard Industries, Inc.
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 Exposure: Upon testing contact causes eye burns and moderate skin irritation but not a skin irritant per the Federal Hazardous Substance Act. When tested the product was not found to be a skin corrosive at 4 hour exposure per DOT/UN Corrosivity Test. Acute Inhalation: Not acutely toxic at a nominal concentration of 12.8 mg./kg.

Medical Conditions Generally Aggravated by Exposure: Not applicable

Emergency and First Aid Procedures: Eyes: In case of contact, immediately flush eyes or skin with plenty of water for 15 minutes. For eyes, CALL A PHYSICIAN. Skin: Flush skin with plenty of water for 15 minutes. If skin irritation persists, get medical attention. Remove and wash all contaminated clothing before reuse. Inhalation: If excess inhaled, remove to fresh air.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled: Absorb large spills with floor dry material. Small spills may be flushed with water and picked up with mop or wet vacuum.

Waste Disposal Method: Dispose of in accordance with state and local regulations.

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

Other Precautions: Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Do not take internally. Avoid breathing spray mist. Do not dispose of in storm drains or streams. 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): None normally required. If exposed to fine droplets of less than 15 microns or dust, a NIOSH/MSHA approved respirator should be worn.

Ventilation: 10 air changes per hour recommended.

Local Exhaust = Not applicable Mechanical (General) = Not applicable Special = N/A Other = N/A

Protective Gloves: Rubber gloves with concentrate

Eye Protection: Chemical splash goggles

Other Protective Clothing or Equipment: None required with normal use of product.

Work / Hygienic Practices: Wash thoroughly after handling.

SECTION IX – TRANSPORTATION INFORMATION

Applicable regulations: 49 CFR = 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 = not applicable; 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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Version 2, * Denotes revisions since last published MSDS. Supersedes Version 1 January 16, 2007