

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 (1072A)

Manufacturer's Name: HILLYARD INDUSTRIES

Product Name: KA-NB CLEANER/DEGREASER

Address: 302 North Fourth Street

Date Prepared: January 30, 2007

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	%
Dipropylene glycol propyl ether	29911-27-1	not est.	not est.	N/A	2-4
Sodium metasilicate (1)	6834-92-0	not est.	not est.	2 mg/M ³	3-8
Water	7732-18-5	not est.	not est.	N/A	---
Sodium carbonate	497-19-8	not est.	not est.	N/A	---
Tetrasodium salt of EDTA	64-02-8	not est.	not est.	N/A	---
Alkyl imino acid, sodium salt	64972-19-6	not est.	not est.	N/A	---
Complex Blend of Surfactants	68991-48-0, 68439-46-3	not est.	not est.	N/A	---

(1) Exposure may be elevated for Sodium hydroxide per OSHA, PEL = 2 mg/M³ or TLV = 2 mg/M³.

VOC = 300 gm/l.; VOS = 0.2 lbs./gallon; VOS of a 1:1 dilution = 0.01%

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: corrected 211°F **Specific Gravity (H₂O = 1):** 25°C = 1.09 & 39°C = 1.09

Vapor Pressure (mm Hg.): 17.6 **Percent Volatile by Volume (%):** 77.3%

Vapor Density (AIR = 1): 0.8 **Evaporation Rate (ethyl ether = 1):** Slower than 1

Solubility in Water: Complete **Appearance and Odor:** clear red liquid; solvent odor

pH (concentrate) = 12.5 - 13.5

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flash point: None to 200°F (T.C.C.) **Flammable Limits:** LEL = N/A UEL = N/A

Extinguishing Media: Foam, carbon dioxide, dry chemical, water spray.

Special Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals.

Unusual Fire and Explosion Hazards: None known to manufacturer

SECTION V – PHYSICAL HAZARDS

Stability: Stable **Conditions to Avoid:** N/A

Incompatibility (Materials to Avoid): Do not mix with strong acids.

Hazardous Decomposition Products or Byproducts: As with any organic material, combustion will produce carbon dioxide and carbon monoxide.

Hazardous Polymerization: Will not occur **Conditions to Avoid:** N/A

SECTION VI – HEALTH HAZARD DATA

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

1. When tested as specified the concentrate was not considered to be a primary skin irritant per the Federal Hazardous Substance Act. The concentrate did induce severe irritation in all six test animals with complete recovery in two by day 14 and balance recovered in day 21. The concentrate is a severe eye irritant. The concentrate was not shown to be acutely toxic following oral administration at 5 gm./kg. The concentrate was not acutely toxic when administered in an acute inhalation exposure at a nominal concentration of 40.8 mg./L (Actual concentration of 8.8 mg./L). 2. None known to Hillyard.

HEALTH HAZARDS (continued)

HEALTH HAZARDS (1. Acute and 2. Chronic)

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: Harmful if swallowed or absorbed through skin. May cause nose and throat irritation. Causes eye burns. Prolonged contact may cause severe skin irritation. Inhalation of high concentration of vapors results in nose and throat irritation.

Medical Conditions Generally Aggravated by Exposure: Repeated overexposure may result in damage to the blood.

Emergency and First Aid Procedures: Inhalation: Remove person to fresh air. If breathing difficulty persists or occurs later, call a physician. In case of contact immediately flush eyes or skin with plenty of water for 15 minutes while removing contaminated clothes and shoes. Get prompt medical attention. Wash clothing before reuse and thoroughly clean contaminated shoes. If swallowed, immediately give large amounts of water and CALL A PHYSICIAN, hospital emergency room or poison control center.

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 (see disposal below).

Small spills: Flush with water and pick up with mop or wet vacuum.

Waste Disposal Method: Dispose of in accordance with state or local regulations. EPA Hazardous Waste Classification: Corrosive (pH = 12.5 - 13.5 on concentrate). Do not dispose of in storm drains or streams.

Precautions To Be Taken In Handling And Storing: Keep container closed when not in use. Since empty packages retain product residue, follow label warning even after package is empty. Spray mist may produce respiratory irritation or damage and increase susceptibility to respiratory illness.

Other Precautions: 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. Do not take internally. Avoid eye contact or prolonged contact with skin. 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): Ventilate to keep air below TLV. A NIOSH approved respirator for organic vapor should be worn if needed to keep level below TLV.

Ventilation:

Local Exhaust = Recommended Mechanical (General) = Recommended Special = N/A Other = N/A

Protective Gloves: Impervious rubber gloves **Eye Protection:** Chemical safety goggles

Other Protective Clothing or Equipment: Impervious boots and aprons where splashing of concentrate is a problem; otherwise, use uniforms or coveralls.

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 =** 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.