

**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-06A)

**Manufacturer's Name:** HILLYARD INDUSTRIES**Product Name:** ASSAULT**Address:** 302 North Fourth Street  
St. Joseph, MO 64501**Date Prepared:** May 18, 2011 (version 2)**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	%
Ethanolamine <sup>(1)</sup>	141-43-5	3ppm	3ppm	N/A	3-5
Sodium metasilicate <sup>(2)</sup>	6834-92-0	N/E	N/E	2 mg/M <sup>3</sup>	1-3
Water	7732-18-5	none	none	N/A	---
Sodium xylene sulfonate	1300-72-7	N/E	N/E	N/A	---
Ethylene glycol monophenyl ether	122-99-6	N/E	N/E	N/A	---
1-Butoxy-2-propanol	5131-66-8	N/E	N/E	N/A	---

(1) Regulated by OSHA and the following states: CA, FL, ID, IL, LA, MA, ME, MN, NJ, PA, WA.

(2) Exposure may be elevated as ceiling for Sodium hydroxide per OSHA: PEL = 2 mg/M<sup>3</sup> or TLV = 2 mg/M<sup>3</sup>.

N/A= Not Applicable N/E= Not Established

**\*SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS**

**Boiling Point:** 208°F **Specific Gravity (H<sub>2</sub>O = 1): 25°C =** 1.02 **\*Density=** 8.58 lbs/gl.  
**Vapor Pressure (mm Hg.):** 17.0 **Percent Volatile by Volume (%):** 94 - 96%  
**Vapor Density (AIR = 1):** 1.0 **Evaporation Rate (ethyl ether = 1):** slower than 1  
**Solubility in Water :** complete **Appearance and Odor:** Clear, light amber liquid; mild solvent odor  
**pH (concentrate) =** 12 - 13

**SECTION IV -- FIRE AND EXPLOSION HAZARD DATA****Flash point:** >200°F **Flammable Limits:** LEL = N/A UEL = N/A**Extinguishing Media:** Water, carbon dioxide, dry chemical or foam**Special Fire Fighting Procedures:** Normal fire fighting procedures may be used. Cool and cautiously approach or handle fire-exposed containers.**Unusual Fire and Explosion Hazards:** N/A**SECTION V -- PHYSICAL HAZARDS****Stability:** Stable **Conditions to Avoid:** N/A**Incompatibility (Materials to Avoid):** Oxidizing materials and strong acids**Hazardous Decomposition Products or Byproducts:** When exposed to fire, produces normal products of combustion.**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** None known to Hillyard**SECTION VI -- HEALTH HAZARD DATA****Routes of entry:** Inhalation? Yes Skin? Yes Ingestion? Yes**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Direct contact with concentrate in eyes can cause severe irritation and damage.

2. Prolonged and repeated exposure to the skin may produce irritation.

**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:** Concentrated product may produce eye burns or moderate skin irritation. Ingestion may produce burns of the mouth, throat, esophagus and stomach.

**Medical Conditions Generally Aggravated by Exposure:** Skin problems such as industrial dermatitis

**Emergency and First Aid Procedures:** In case of contact immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. If swallowed, do not induce vomiting; immediately give large amounts of water and CALL A PHYSICIAN, hospital emergency room or poison control center.

Inhalation - Remove victim to fresh air; if respiratory tract remains irritated, CALL A PHYSICIAN.

**SECTION VII -- PRECAUTIONS FOR SAFE HANDLING AND USE**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Absorb with floor dry or similar inert material. Sweep or scrape up and put in appropriate container. Rinse spill area thoroughly with water. Use appropriate protective equipment.

**Waste Disposal Method:** Disposal of concentrate regulated by Federal Resource Conservation and Recovery Act as a corrosive waste (40 CFR 261.22). Disposal of regulated quantities should be neutralized at a permitted facility in accordance with federal/state/local regulations (corrosive waste-pH concentrate = 12-13). Waste from normal product use may be sewer to public-owned treatment works in compliance with applicable federal, state and local pretreatment requirements.

**Precautions To Be Taken In Handling And Storing:** Keep container closed when not in use. Container disposal: Triple rinse (or equivalent), then offer clean, dry container for recycling or reconditioning.

**Other Precautions:** Do not use with fog mist or fine droplet sprayer without respiratory protection. 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 concentration below TLV on monoethanolamine and sodium metasilicate.

**Ventilation:**

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

**Protective Gloves:** Impervious gloves when working with concentrate      **Eye Protection:** Chemical safety goggles when working with concentrate

**Other Protective Clothing or Equipment:** Impervious to water and alkaline liquid where concentrate is a concern.

**Work / Hygienic Practices:** Wash thoroughly after handling.

**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.

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