

**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 (538N-90A)**

**Manufacturer's Name:** HILLYARD INDUSTRIES

**Address:** 302 North Fourth Street  
St. Joseph, MO 64501

**Product Name:** ARSENAL RECOAT PREP

**Date Prepared:** September 25, 2007

**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:<br>Common Name(s)) | CAS#       | OSHA PEL        | ACGIH<br>TLV    | OTHER LIMITS<br>RECOMMENDED | %   |
|---|------------|-----------------|-----------------|-----------------------------|-----|
| Sodium metasilicate (1)                         | 6834-92-0  | not established | not established | 2 mg/M <sup>3</sup>         | 4-7 |
| Ethanolamine (2)                                | 141-43-5   | 3 ppm           | 3 ppm           | N/A                         | 3-6 |
| Water   | 7732-18-5  | none            | none            | N/A                         | --- |
| Aliphatic Alcohol Alkoxylates                   | 37251-67-5 | not established | not established | N/A                         | --- |
| Amphoteric Surfactant                           | 94441-92-6 | not established | not established | N/A                         | --- |

(1) 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>.

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

VOC (concentrate) = 5 %; VOC (Min. dilution) = 0.08%

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

|   |  |
|---|--|
| <b>Boiling Point:</b> 206°F             | <b>Specific Gravity (H<sub>2</sub>O = 1):</b> 25°C = 1.07 & 39°C = 1.07    |
| <b>Vapor Pressure (mm Hg.):</b> 17.2    | <b>Percent Volatile by Volume (%):</b> 82                                  |
| <b>Vapor Density (AIR = 1):</b> 0.7     | <b>Evaporation Rate (ethyl ether = 1):</b> slower than 1                   |
| <b>Solubility in Water:</b> appreciable | <b>Appearance and Odor:</b> clear colorless liquid; non-objectionable odor |
| <b>pH (concentrate) = 13.2</b>          |  |

**SECTION IV -- FIRE AND EXPLOSION HAZARD DATA**

**Flash point:** None (T.C.C.) **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:** Produces normal products of combustion when exposed to fire.

**Hazardous Polymerization:** Will not occur **Conditions to Avoid:** None known

**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. Prolonged and repeated exposure to skin may product irritation. Inhalation of spray mist may result in varying degrees of irritation. Concentrated product was not toxic by inhalation at 218 mg./Liter. Product was not orally toxic at 5 gm./kg. 2.None known to manufacturer.

**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:** Concentrated product may produce skin and eye burns. 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; for eye contact get immediate medical attention; for skin contact if irritation persists get medical attention. 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 is regulated by the Resource Conservation and Recovery Act; concentrate is corrosive per EPA Hazardous Waste classification. Disposal of regulated quantities should be neutralized at a permitted facility in accordance with all federal, state and local 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. Waste from normal use may be sewer to public-owned treatment works in compliance with applicable federal, state and local requirements.

**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 ethanolamine or 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

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