

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

Product Name: ARSENAL RECOAT PREP

Address: 302 North Fourth Street

Date Prepared: September 25, 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	%
Sodium metasilicate (1)	6834-92-0	not established	not established	2 mg/M ³	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/M³ or TLV = 2 mg/M³.

(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

Boiling Point: 206°F	Specific Gravity (H₂O = 1): 25°C = 1.07 & 39°C = 1.07
Vapor Pressure (mm Hg.): 17.2	Percent Volatile by Volume (%): 82
Vapor Density (AIR = 1): 0.7	Evaporation Rate (ethyl ether = 1): slower than 1
Solubility in Water: appreciable	Appearance and Odor: clear colorless liquid; non-objectionable odor
pH (concentrate) = 13.2	

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 sewered 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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