

H80191

H80122

#801

MATERIAL SAFETY DATA SHEET

NFPA RATING: Health = 2 Flammability = 0 Reactivity = 0
 HMIS RATING: Health = 1/2 Flammability = 0 Reactivity = 0

SECTION I -- IDENTITY AND MANUFACTURER'S INFORMATION (1070A)

Manufacturer's Name: HILLYARD INDUSTRIES Product Name: ARSENAL ASSURANCE HD SPRAY & WIPE CLEANER
 Address: 302 North Fourth Street
 St. Joseph, MO 64501 Date Prepared: October 2, 2006

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)

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	5-10
Water	7732-18-5	none	none	N/A	---
Akyl imino acid, sodium salt	64972-19-6	not established	not established	N/A	---
Complex blend of surfactants	Unknown to Hillyard	not established	not established	N/A	---

(1) Exposure may be evaluated as ceiling for Sodium hydroxide per OSHA: PEL = 2 mg/m³ or TLV = 2 mg/m³.
 VOS = 0.0 lbs./gallon

SECTION III -- PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point: 212°F Specific Gravity (H₂O = 1): 25°C = 1.1 & 39°C = 1.1
 Vapor Pressure (mm Hg.): 17.7 Percent Volatile by Volume (%): 87 %
 Vapor Density (AIR = 1): 0.6 Evaporation Rate (ethyl ether = 1): slower than 1
 Solubility in Water: complete Appearance and Odor: Clear, orange liquid; citrus odor
 pH (concentrate) = 13.0

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

Flash point: None to boiling (Tag Closed Cup) Flammable Limits: LEL = N/A UEL = N/A
 Extinguishing Media: Foam, dry chemical, carbon dioxide, water spray.
 Special Fire Fighting Procedures: None known to manufacturer.
 Unusual Fire and Explosion Hazards: None known to manufacturer.

SECTION V -- PHYSICAL HAZARDS

Stability: Stable Conditions to Avoid: None known to manufacturer
 Incompatibility (Materials to Avoid): Avoid strong oxidizing agents. Do not use with aluminum equipment at temperatures above 120°F.
 Hazardous Decomposition Products or Byproducts: None known to manufacturer.
 Hazardous Polymerization: Will not occur Conditions to Avoid: N/A

SECTION VI -- HEALTH HAZARD DATA

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

HEALTH HAZARDS (1. Acute and 2. Chronic)

1. According to Primary Skin Irritation Test (FHSA), product concentrate is corrosive to skin. Eye Irritation Test (FHSA) = corrosive. When tested as specified this product was not considered to be a UN/DOT corrosive at 4 hours. Acute oral limit test showed the product was not oral toxic at 5g/kg. Since this product is corrosive it may be harmful if swallowed. Acute inhalation - 1 Hour Toxic Limit test - not toxic at nominal concentration of at least 14.9 mg/l. Inhalation to fine fog mist can cause irritation to mucous membranes. Fine fog mist application is not recommended. 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%.