

**MATERIAL SAFETY DATA SHEET**

**NFPA RATING:** Health = 2 Flammability = 1 Reactivity = 0

**HMIS RATING:** Health = 2 Flammability = 1 Reactivity = 1

**SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION (1054B)**

**Manufacturer's Name:** HILLYARD INDUSTRIES

**Product Name:** ARSENAL SUPROX

**Address:** 302 North Fourth Street

**Date Prepared:** September 26, 2006

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 | %      |
|--------------------------|----------------------------|-----------------------|-----------------------|--------------------------|--------|
| Hydrogen Peroxide        | 7722-84-1                  | 1.4 mg/m <sup>3</sup> | 1.4 mg/m <sup>3</sup> | N.A.                     | 5 - 8% |
| Water                    | 7732-18-5                  | none                  | none                  | N.A.                     | ---    |
| Complex Surfactant Blend | 68991-48-0 &<br>68439-46-3 | not established       | not established       | N.A.                     | ---    |

VOC (Concentrate) = 0.40%; VOC (min. dilution 1:10) = 0.04%

**SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS**

|                                 |          |   |                                      |
|---------------------------------|----------|---|--------------------------------------|
| <b>Boiling Point:</b>           | 217°F    | <b>Specific Gravity (H<sub>2</sub>O = 1):</b> | 25°C = 1.02 & 39°C = 1.02            |
| <b>Vapor Pressure (mm Hg.):</b> | 17.6     | <b>Percent Volatile by Volume (%):</b>        | 94.6%                                |
| <b>Vapor Density (AIR = 1):</b> | 0.65     | <b>Evaporation Rate (ethyl ether = 1):</b>    | Slower than 1                        |
| <b>Solubility in Water:</b>     | complete | <b>Appearance and Odor:</b>                   | Clear, colorless liquid, Citrus odor |
| <b>pH (concentrate) =</b>       | 4-5      |   |                                      |

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

**Flash point:** >145°F corrected (T.C.C.) **Flammable Limits:** LEL = Not determined UEL = Not determined

**Extinguishing Media:** Do NOT use CO<sub>2</sub> extinguisher on this material: use only water spray or appropriate foam. Do not use organic compounds on this material.

**Special Fire Fighting Procedures:** As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

**Unusual Fire and Explosion Hazards:** Release of oxygen may support combustion. Contact with incompatible materials (e.g. metals, alkalis, and strong reducing agents) may cause hazardous decomposition resulting in the release of heat, steam, and oxygen. Exposure to heat may cause hazardous decomposition. Hydrogen peroxide may spontaneously decompose above 150°C. Do not mix with kerosene or gasoline.

**SECTION V – PHYSICAL HAZARDS**

**Stability:** Stable **Conditions to Avoid:** Heat and flame.

**Incompatibility (Materials to Avoid):** Metals, Reducing agents, Alkalis, Combustible materials, Organic materials, Salt of heavy metals, Impurities.

**Hazardous Decomposition Products or Byproducts:** Oxygen, oxides of carbon and steam.

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

**SECTION VI – HEALTH HAZARD DATA**

**Routes of entry:** Inhalation? yes Skin? yes Ingestion? LD50 greater than 5 g/kg

**HEALTH HAZARDS (1. Acute and 2. Chronic)**

1. Contact with concentrate may cause eye burns and prolonged skin contact with concentrate may cause slight skin irritation. Ingestion can cause nausea, vomiting and gastrointestinal irritation. Prolonged inhalation may cause respiratory irritation. Acute oral toxicity of concentrate per EPA method = >5000 mg./kg. Acute dermal irritation = Non-irritating. Toxicity Category IV per EPA Method. Tests show the product is not a skin sensitizer. Acute inhalation toxicity = LC50>2.13 mg./Liter.

2. None known to Hillyard Industries when used according to label directions.

## SECTION VI – HEALTH HAZARD DATA continued

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:** Eye symptoms may occur with delay such as conjunctiva and burns; reaction may be delayed. Prolonged skin contact with concentrate may cause irritation. Inhalation of fine mist or aerosols can lead to irritation and inflammation of the respiratory tract and cause pulmonary edema. Symptoms may occur with delay. Swallowing can lead to irritation of the mucous membranes in the mouth, esophagus and stomach.

**Medical Conditions Generally Aggravated by Exposure:** Open cuts and sores may be irritated by contact.

**Emergency and First Aid Procedures:** Eye and Skin Contact – Flush eyes and skin with plenty of water for 15 minutes; apply water gently and do not rub area. For eyes seek medical attention immediately. For skin, if irritation persists, get medical attention. If swallowed, do not induce vomiting. Seek immediate medical attention. If excess inhaled, remove to fresh air; if breathing is difficult, seek medical attention.

## SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

**Steps To Be Taken In Case Material Is Released Or Spilled:** Small spills should be flushed with water and picked up with mop. Hydrogen peroxide quickly decomposes to oxygen and water.

**Waste Disposal Method:** Dispose of in accordance with state or local regulations.

**Precautions To Be Taken In Handling And Storing:** Keep container closed when not in use. Since empty packages retain product residue, follow label warnings even after package is empty.

**Other Precautions:** Do not dispose of in storm drains or streams. 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):** Not normally required with adequate ventilation.

**Ventilation:**

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

**Protective Gloves:** Impervious gloves (neoprene or rubber) with concentrate. **Eye Protection:** Splash goggles with concentrate.

**Other Protective Clothing or Equipment:** Avoid prolonged contact. Wear clothing to prevent contact with concentrate if necessary. Eye wash, safety shower to be available when working with concentrate.

**Work / Hygienic Practices:** Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling; wash clothing before reuse. Completely submerge contaminated clothing or other materials in water prior to drying.

## 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:** not applicable; **Reactivity:** not applicable

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