

**MATERIAL SAFETY DATA SHEET**  
**EPA Registration # 1839-224-1658**      **EPA EST # 1658-MO-1**

**NFPA RATING:** Health = 3    Flammability = 1    Reactivity = 0  
**HMIS RATING:** Health = 3    Flammability = 1    Reactivity = 0

**SECTION I – IDENTITY AND MANUFACTURER'S INFORMATION** (554N-06A)

**Manufacturer's Name:** HILLYARD INDUSTRIES  
**Address:** 302 North Fourth Street  
 St. Joseph, MO 64501

**Product Name:** SUPROX-D  
**Date Prepared:** April 14, 2010 (new)  
**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:**

<b>Common Name(s)</b>	<b>CAS#</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>OTHER LIMITS RECOMMENDED</b>	<b>%</b>
Deionized Water	7732-18-5	N/E	N/A	N/A	80-90
Hydrogen Peroxide	7722-84-1	1.4 mg/m <sup>3</sup>	1.4 mg/m <sup>3</sup>	N/A	<8
Alkyl dimethyl benzyl ammonium chloride (C12-16)	68424-85-1	N/E	N/A	N/A	2.304
Octyl decyl dimethyl ammonium chloride	32426-11-2	N/E	N/A	N/A	1.728
Ethanol	64-17-5	1900 mg/m <sup>3</sup>	1000 mg/m <sup>3</sup>	N/A	1-3
Lauramine Oxide	1643-20-5	N/E	N/A	N/A	1-3
Didecyl dimethyl ammonium chloride	7173-51-5	N/E	N/A	N/A	0.864
Diocetyldimethylammonium chloride	5538-94-3	N/E	N/A	N/A	0.864
Phosphoric Acid	7664-38-2	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	N/A	<1

**VOC (concentrate) = 0.72% VOC (minimum dilution) 0.011%**

**SECTION III – PHYSICAL / CHEMICAL CHARACTERISTICS**

<b>Boiling Point:</b> 206°F corrected	<b>Specific Gravity (H<sub>2</sub>O = 1):</b> 25°C = 1.0196	<b>Density =</b> 8.49 lb/gal.
<b>Vapor Pressure (mm Hg.):</b> 17.65	<b>Percent Volatile by Weight (%):</b> 93 – 94	
<b>Vapor Density (AIR = 1):</b> 0.6323	<b>Evaporation Rate (ethyl ether = 1):</b> Slower than 1	
<b>Solubility in Water:</b> complete	<b>Appearance and Odor:</b> Clear, colorless liquid, fragrance	
<b>pH (concentrate) =</b> 1.75 – 2.75		

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

**Flash point:** >160 °F corrected (T.C.C.)      **Flammable Limits:** LEL = Not determined      UEL = Not determined

**Extinguishing Media:** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Special Fire Fighting Procedures:** As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**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, flame and sparks.

**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? Yes

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

1. Contact with concentrate may be corrosive to eyes. Product can be severely irritating to the skin. Harmful if absorbed through the skin. Inhalation may cause irritation of respiratory tract, may be fatal if inhaled. Ingestion can cause nausea, vomiting and diarrhea.
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

**Signs and Symptoms of Exposure:** Eye symptoms may occur with delay such as conjunctiva and burns; reaction may be delayed. This product has no carcinogens listed by IARC, NTP, NIOSH, or ACGIH as of this date, greater than or equal to 0.1%.

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 Contact** – Immediately flush eyes with plenty of water for 15 minutes. Seek medical attention. **Skin Contact:** For skin, flush with large amounts of water. Immediately take off all contaminated clothing. Wash clothing separately before reuse. Seek medical attention. **If inhaled,** move victim to fresh air; if breathing is difficult. Seek medical attention. Seek medical attention if symptoms persist. **If swallowed,** do not induce vomiting. Seek immediate medical attention.

## SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

**Steps To Be Taken In Case Material Is Released Or Spilled:** Small spills: Use a non-combustible material such as floor dry product to soak up the product and place into a container for later disposal. Large spills: Dike far ahead of liquid spill for later disposal. Eliminate ignition sources including sources of electrical, static or frictional sparks. Wear appropriate protective equipment and clothing during clean-up.

**Waste Disposal Method:** **CONTAINER DISPOSAL** - Do not reuse empty container. Triple rinse empty container with water. Return metal drum then offer for reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers may be disposed of in a sanitary landfill, incinerated, or if allowed by local authorities, by burning. If burned, stay out of smoke. Offer for recycling if available. **PESTICIDE DISPOSAL** - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Precautions To Be Taken In Handling And Storing:** DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. Store in cool place. Keep in a well-ventilated place. Keep at temperatures between 50F and 120F. Do not handle or store near an open flame, heat or other sources of ignition. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

**Other Precautions:** Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

## 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 (Gallon Boxes) for U.S. Highway:** non-regulated

**Proper shipping name (5 & 55 Gallon Drums) for U.S. Highway:** non-regulated

**UN NO.:** not applicable **Limited Qty.:** not applicable **Hazard Class** = not applicable

**Labels required:** Not required on gallon boxes by highway; 5 & 55 gallon drum = Flammable Liquid;

1 gallon by Air & Water = not applicable **DOT Exception:** not applicable

**EPA Hazardous waste number / code:** not listed

**Hazardous waste characteristics:** Ignitability: not applicable; Corrosivity: not applicable; Reactivity: yes

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