

Material Safety Data Sheet **Potassium Hypochlorite**

Section 1: Product Identification

PRODUCT NAME

Potassium Hypochlorite

CHEMICAL NAME Potassium Hypochlorite (Aqueous Solution)

REVISION DATE

April 1, 2002

CAS NUMBER

7778-66-7

EMERGENCY NUMBERS

24 Hour Emergency: CHEMTREC 1-800-424-9300 Product Information: Lemont, IL 1-630-257-3900

Section 2: Physical Data & Ingredients

APPEARANCE

Clear to Light Yellow

ODOR

Liquid Pungent, irritating,

bleachlike

VAPOR PRESSURE

Approx. that of air

BOILING POINT

Decomposes prior to boiling

SOLUBILITY

Complete

VAPOR DENSITY (Air=1)

Approx. that of air.

pH of SOLUTIONS Approx. 12

SPECIFIC GRAVITY 1.175 – 1.2 @ 68° F

INGREDIENTS

Materials: Chlorine

Potassium Hydroxide

Water

11.5 - 13.0 by Volume

0.3 - 5.0Balance

Section 3: Fire & Explosion Information

FIRE - Not considered to be a fire hazard. Flammable limits in air (% by LEL: N/A volume) UEL: N/A

EXPLOSION - Not considered an explosion hazard.

FIRE EXTINGUISHING MEDIA - Use any means suitable for extinguishing surrounding fire.

Section 4: Reactivity Data

STABILITY - Stable under ordinary conditions of use and storage. Unstable at elevated temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS - Decomposes under various mechanisms. May generate chlorine or oxygen which may be toxic and explosive, respectively.

HAZARDOUS POLYMERIZATION - This substance does not polymerize.

INCOMPATIBILITY: (MATERIALS TO AVOID) - Reacts vigorously with amine, ammonium, salts, reducing agents, methanol, acids and most organics.

Section 5: Leak, Spill, Disposal Information

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED

Move unprotected personnel upwind out of danger.

WASTE DISPOSAL METHOD

Dilute with water and flush to local sewer system if permitted. Solid waste must be disposed of in a permitted waste management facility. Ensure compliance with local, state and federal laws.

Section 6: Health & Hazard Data

IS CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?

> NTP - NO IARC - NO OSHA - NO

MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE: None Known

PERMISSIBLE EXPOSURE LIMIT

NIOSH: Potassium Hydroxide 2 mg / m³ ceiling Chlorine 0.5 ppm - 8 hour TWA, 1 ppm - 15 min. STEL

ACUTE TOXICITY

INGESTION – Ingestion of a few ounces can cause corrosion of mucous membranes, swelling of the throat, perforation of the esophagus and stomach, vomiting, colitis, hypotension, and circulatory collapse. May lead to convulsions, coma or death. At stronger concentrations, as little as 1 ounce may be lethal.

EYE / SKIN - Liquid contact can produce irritations of the skin with blistering. Direct contact with eyes can cause redness, pain and in the case of concentrated solutions, permanent damage.

INHALATION – Inhalation of mist or fumes can cause bronchial irritation, cough, difficult breathing, inflammation of the mouth, nausea, and in severe exposures, pulmonary edema. Material has odor of chlorine.

CHRONIC TOXICITY- No Data Found

Section 7: Emergency & First Aid Procedures

<u>INHALATION</u> - Move person to fresh air. If breathing is difficult, administer oxygen and call a physician. If not breathing, give artificial respiration.

EYE CONTACT - Immediately flush skin with plenty of water. Remove any contaminated clothing. If irritation occurs, consult a physician.

SKIN CONTACT - Wear impervious protective rubber clothing; including boots, lab coat, apron or coveralls to prevent skin contact.

INGESTION - Do not induce vomiting! Give large amounts of water. Never give anything by mouth to an unconscious person. Take immediately to a hospital or physician.

<u>NOTES TO PHYSICIAN</u> - Do not administer acidic antidotes or Sodium Bicarbonate following Hypochlorite overexposure. An ounce of 1% Sodium Thiosulfate or milk of magnesia is helpful.

Section 8: Occupational Control Measures

VENTILATION REQUIREMENTS - Local exhaust .

PERSONAL RESPIRATORS: (NIOSH APPROVED) -

Recommended for all personnel working In or about an area of potential mist exposure.

SKIN PROTECTION REQUIREMENTS - Wear impervious protective clothing; including boots; gloves; lab coat; apron or coveralls to prevent skin contact. Preferred Materials: Nitrile, Neoprene, PVC.

EYE PROTECTION REQUIREMENTS - Use chemical safety goggles impervious to product. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in immediate work area.

NOTE: ALL PROTECTIVE EQUIPMENT MUST CONFORM WITH 29 CFR 1910.132.

Section 9: Handling & Storage

Store in a cool, dry ventilated area. Protect against physical damage. Keep separate from acids and organics.

Section 10: Regulatory Information

DOT HAZARD CLASS

DOT LABEL

Corrosive

DOT PLACARD REQUIRED

Corrosive Material - 8 Corrosive - UN 1791

REPORTABLE QUANTITY

77 Lbs. to meet Chlorine RQ 20,000 lbs. to meet KOH RQ

NFPA / HMIS RATINGS

Health - 3 Flammability - 0

Reactivity - 0

TSCA - All ingredients are listed on the TSCA inventory.

SARA TITLE III

SARA 311,312 HAZARD CLASS: Acute Health Hazard. Reactive Hazard.

SARA 313 - Not Listed SARA 302: Not listed.

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