

# MATERIAL SAFETY DATA SHEET

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**PRODUCTS:** ChlorAC™

**Cat. No.** 1700-0132

## Section I – General

CAS #: Chloroacetic acid [79-11-8], potassium acetate [127-08-2]  
FORMULA:  $C_2H_3ClO_2$ ,  $C_2H_3KO_2$   
CHEMICAL NAME: Chloroacetic acid  
SYNONYMS: Monochloroacetic acid  
CHEMICAL FAMILY: Acid

## Section II – Hazardous Ingredients

1: 13% Chloroacetic acid

## Section III – Physical Data

MELTING POINT: -7°C  
BOILING POINT: 102°C  
APPEARANCE: Clear, colorless liquid with a strong, pungent odor, characteristic of vinegar.  
SOLUBILITY: Aqueous solution

## Section IV – Toxicity Data

RTECS #: AF8575000  
RTECS NAME: Chloroacetic acid  
TOXICITY: Toxicity data are for crystalline chloroacetic acid (99+%). ChlorAC is 13% chloroacetic acid. Oral-rat LD<sub>50</sub>: 580 mg/kg; lhl-rat LD<sub>50</sub>: 180 mg/m<sup>3</sup>; lpr-rat LD<sub>50</sub>: 16600 µg/kg; Scu-rat LD<sub>50</sub>: 5 mg/kg; lvn-rat LD<sub>50</sub>: 55 mg/kg; Scu-mus LD<sub>50</sub>: 250 mg/kg.  
REVIEWS: Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data for crystalline chloroacetic acid (99+%) are presented here. Refer to actual entry in RTECS for complete information.

## Section V – Health Hazards and First Aid

ACUTE EFFECTS: May be fatal if inhaled, swallowed, or absorbed through skin. Material is extremely destructive to the eyes, skin, and tissue of the mucous membranes and upper respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, and edema of the larynx and bronchi; chemical pneumonitis; and pulmonary edema. Symptoms of exposure include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Target organs: central nervous system, heart, skeletal muscle, and kidneys.

- CHRONIC EFFECTS: The chemical, physical, and toxicological properties have not been thoroughly investigated.
- EYE CONTACT: Immediately flush with plenty of water for at least 15 minutes; assure adequate flushing by separating eyelids with fingers. Call a physician.
- SKIN CONTACT: Immediately wash with copious amounts of water and soap. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. Call a physician.
- INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- INGESTION: Wash out mouth with water provided victim is conscious. Call a physician.

#### **Section VI – Fire and Explosion Hazards**

- FLASHPOINT: Not applicable
- EXTINGUISHING MEDIA: Water spray; dry chemical; carbon dioxide; alcohol or polymer foam.
- FIREFIGHTING PROCEDURE: Wear self-contained breathing apparatus and protective clothing to protect contact with skin and eyes.
- UNUSUAL HAZARDS: Emits toxic fumes (see below) under fire conditions.
- EXPLOSIVE PROPERTIES: Non-explosive

#### **Section VII – Reactivity**

- GENERAL: Stable
- INCOMPATIBILITIES: Keep from contact with oxidizing agents, bases, and reducing agents.
- HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: Emits toxic fumes of carbon monoxide, carbon dioxide, hydrogen chloride gas, and phosgene gas.

#### **Section VIII – Spill or Leak Procedures**

- SPILL PROCEDURE: Wear rubber gloves. Neutralize spill with sodium bicarbonate, slaked lime, or crushed lime stone. Adsorb neutralized spill with chemical sorbent, Vermiculite, or saw dust. Sweep up, place in a plastic bag, and hold for waste disposal. Wash spill site with soap and water.
- WASTE DISPOSAL: This product may be mixed or dissolved in a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local regulations.

#### **Section IX – Precautions for Handling and Storage**

- SAFETY EQUIPMENT: Chemical safety goggles, laboratory coat, rubber gloves, safety-shower with eye-wash, NIOSH / MSHA approved respirator.
- HANDLING PROCEDURES: Avoid eye and skin contact and inhalation. Do not ingest. Wear safety glasses and gloves. Wash thoroughly after handling.
- STORAGE PROCEDURES: Keep tightly closed. Store in cool place.

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