

**AERCHEM INC.**  
**320 North Walnut**  
**Bloomington, IN 47408**

**Telephone: 812.334.9996**

**Fax: 812.334.1960**

**Emergency: 800.424.9300**

---

**SECTION 1: IDENTIFICATION**

**Product Name:** Potassium Hydroxide

**Synonym or Generic ID:** Caustic potash, Potassium hydrate, AC-7652, AC-7650, AC-7654T

**CAS No.:** 1310-58-3

---

**SECTION 2: PHYSICAL DATA**

Appearance and Odor: White crystal, flake or solid. Odorless. Deliquescent.

Boiling point: 1320°C

Vapor Pressure (mmHg): 1 mm @ 719°C

Specific Gravity (Water=1): 2.04

Solubility in water: 52.8% @ 20°C

Volatility: n/ap

Vapor Density: n/ap

---

**SECTION 3: FIRE AND EXPLOSION DATA**

Flash point: None

Flammable limit: LEL n/av

Extinguishing Media: Use extinguishing media appropriate to surrounding fire conditions. Keep water away from sodium hydroxide if possible. Do not use water.

Fire Fighting Procedures: Self contained breathing apparatus with a full facepiece operated in a pressure demand or other positive pressure mode. Wear adequate personal protection to prevent contact with material or its products.

Unusual Fire and Explosion Hazards: Avoid soaking sodium hydroxide with water due to violent reaction which will generate sufficient heat to ignite combustible materials. Reacts with most common metals to produce hydrogen (explosive and flammable gas). Emits toxic fumes under fire conditions.

---

**SECTION 4: REACTIVITY DATA**

Stable \_\_\_\_\_ Unstable   X  

**Incompatibilities:** Acids, water, flammable / combustible materials, organic materials, peroxides, organohalogen compounds (may react to form spontaneously combustible materials). Nitro and chloro organic compounds (may react explosively). Acroleine, acrylonitrile, acetaldehyde (Violet polymerization). Reacts with most common metals to produce hydrogen. Maleic anhydride, carbides, chlorides, phosphorus, trichloroethylene, chlorine dioxide.

**Hazardous Polymerization:** Will not occur.

---

**SECTION 5: HEALTH HAZARD DATA**

**Threshold Limit Value (TLV):** (Ceiling) 2mg / mg3 (ACGIH)

**Oral LD50 (rat):** 365 mg / kg

---

## **SECTION 6: SPILLAGE AND DISPOSAL PROCEDURES**

### **First Aid:**

**Eyes:** Immediately flush eyes with large amounts of water for at least 30 minutes holding lids apart to ensure flushing of the entire surface. Obtain medical attention immediately.

**Skin:** Wash skin with copious quantities of water for at least 30 minutes. Remove contaminated clothing. Obtain medical attention immediately. Wash clothing before reuse.

**Inhalation:** Remove patient to fresh air. Administer approved oxygen supply if breathing is difficult. Administer artificial respiration or CPR if breathing has ceased. Call a physician.

**Ingestion:** Do not induce vomiting. If conscious wash out mouth with water. Obtain medical attention immediately. Give a large quantity of water to dilute. Never give anything by mouth to an unconscious person.

**Spillage:** Evacuate. Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up and place in container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

**Disposal:** Neutralize carefully with weak acid to pH 6 to 8. According to all applicable regulations. Avoid run off.

---

## **SECTION 7: PRECAUTION TO BE TAKEN IN HANDLING AND STORING**

**Other Precautions:** Store in a cool place away from heated areas, sparks and flame. Store in a cool, dry area. Store in a well ventilated area. Store away from incompatible materials. Product is highly hygroscopic. Keep tightly closed. Empty container may contain hazardous residue. Do not add other material to the container. Do not wash down the drain. Avoid raising dust. Do not get in eyes, on skin, or on clothing. Wash well after each use, in accordance with good storage and handling practices. Do not allow smoking and food consumption while handling.

---

## **SECTION 8: SPECIAL PROTECTION INFORMATION**

**Ventilation:** Use only in a chemical fume hood. Adequate ventilation to maintain vapor / dust below TLV.

**Eye Protection:** Face shield. Safety goggles.

**Respiratory Protection:** If more than TLV, do not breath vapor. Wear self-contained breathing apparatus.

---

## **TRANSPORT INFO.**

**DOT classification:** Class 8, Corrosive, UN1813, packing group II, potassium hydroxide solid