

POTASSIUM CHLORIDE**PRODUCT IDENTIFICATION****Chemical Name and Synonyms:**

Potassium chloride; Potassium muriate

Chemical Family:

Inorganic salt

Chemical Formula:

KCl

Product Use:

Laboratory reagent

Manufacturer's Name and Address:

Caledon Laboratories Ltd.

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HAZARDOUS INGREDIENTS OF MATERIALS

Ingredients	%	TLV Units	CAS No.
Potassium chloride	>99	Not established	7447-40-7

PHYSICAL DATA**Physical State:**

Solid

Odour and Appearance:

White crystals or powder, odourless

Odour Threshold (ppm):

Not applicable

Vapour Pressure (mm Hg):

~Zero

Vapour Density (Air = 1):

2.57

Evaporation Rate:

Not applicable

Boiling Point (degrees C):

Sublimes at 1500°C

Melting Point (degrees C):

771°C

pH:

7 (saturated, 15°C)

Specific Gravity:

1.987 @ 20°C

Coefficient of Water/Oil distribution:

Not applicable

Solubility:

34.7 gm/100 cc

SHIPPING DESCRIPTION**UN:**

Not regulated

T.D.G. Class:

Not regulated

Pkg. Group:

Not regulated

REACTIVITY DATA**Chemical Stability:**

Stable, hygroscopic.

Incompatibility with other substances:

Strong oxidizing agents, strong acids, lithium, bromine trifluoride.

Reactivity:

Avoid excessive heat, exposure to moisture, incompatible materials, generation of dust.

Hazardous Decomposition Products:

Hydrogen chloride gas

FIRE AND EXPLOSION DATA**Flammability:**

Not combustible

Extinguishing Media:

Use an extinguisher appropriate to the surrounding material that is burning. Firefighters should wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes, and contact with skin and eyes.

Flash Point (Method Used):

Not applicable

Autoignition Temperature:

Not applicable

Upper Flammable Limit (% by volume):

Not applicable

Lower Flammable Limit (% by volume):

Not applicable

Hazardous Combustion Products:

Emits toxic fumes under fire conditions

Sensitivity to Impact:

None identified

Sensitivity to Static discharge:

None identified

TOXICOLOGICAL PROPERTIES AND HEALTH DATA**Toxicological Data:****LD₅₀:**

(oral, rat) 2,600 mg/kg; (oral, mouse) 1,500 mg/kg

LC₅₀:

Not available

Effects of Acute Exposure to Product:**Inhaled:**

Inhalation of dust may cause mild irritation to mucous membranes, nose and throat. Symptoms may include coughing, dryness and sore throat.

In contact with skin:

May cause mild irritation.

In contact with eyes:

May cause irritation.

Ingested:

May cause gastrointestinal irritation. Low hazard for normal industrial use. Large oral doses may cause diarrhea, nausea and vomiting, altered blood picture, circulatory problems, hypernoea and convulsions

Effects of Chronic Exposure to Product:**Carcinogenicity:**

Not listed as a carcinogen by NTP, IARC, or OSHA

Teratogenicity:

No effects reported (RTECS No. TS8050000)

Reproductive Effects:

No effects reported

Mutagenicity:

Effects in some laboratory testing

Synergistic Products:

None known

PREVENTIVE MEASURES

POTASSIUM CHLORIDE

Engineering Controls:

Local exhaust ventilation.

Respiratory Protection:

Dust mask. NIOSH approved respirator for dusty conditions. Positive-pressure, full face-piece self-contained breathing apparatus for high or unknown concentrations, as in fire or spill conditions.

Eye Protection:

Chemical safety glasses.

Skin Protection:

Rubber or plastic gloves. Other protective body-covering clothing sufficient to limit contact.

Other Personal Protective Equipment:

Eye wash fountain and safety shower in work area.

Leak and Spill Procedure:

Cleanup personnel should be trained in the handling of chemicals, and should wear protective equipment and clothing sufficient to prevent inhalation of dust or fumes and contact with skin and eyes. Gather up in a manner that does not raise dust. Prevent from entering sewers or waterways. Transfer carefully into container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent.

Waste Disposal:

Follow all federal, provincial and local regulations for disposal.

Handling Procedures and Equipment:

Use routine safe handling procedures. Personnel working with this product should be trained in its hazards and its safe use. Avoid generating dust. Use the smallest amount possible for the purpose, in a well-ventilated area. Avoid contact. Wash after handling.

Storage Requirements:

Store in suitable, labelled containers, in a cool, dry, well-ventilated area, out of direct sunlight. Keep containers tightly closed when not in use and when empty. Protect from damage. Store away from incompatible materials.

FIRST AID MEASURES**Specific Measures:****Eyes:**

Flush eyes thoroughly with gently running water, holding eyelids open while flushing, for five to ten (5-10) minutes, or until no trace of chemical remains. Get medical advice if irritation develops.

Skin:

Remove contaminated clothing. Brush or wipe off dry material. Flush skin with plenty of running water until no evidence of chemical remains. If irritation develops get medical attention.

Inhalation:

Remove to fresh air. Give oxygen and get medical attention for any breathing difficulty.

Ingestion:

Rinse mouth thoroughly with water and give 2 to 4 glasses of water to drink to dilute. If victim feels unwell, or if a very large amount has been ingested, get medical attention.

REFERENCES USED

CCINFO disc

Sax, Lewis: *Hawley's Condensed Chemical Dictionary*, 11th ed., 1987

Sax: *Dangerous Properties of Industrial Materials*, 5th ed., 1979
Suppliers' Material Safety Data Sheets

ADDITIONAL INFORMATION

February 23, 1989

Revision:

June 2012

MSDS:

5920-1

Proposed WHMIS Designation:

D2B (irr)

Prepared by: Caledon Laboratories Ltd. (905)

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Date Issued: