

# POTASSIUM CHLORIDE (POTASH)

## SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	POTASSIUM CHLORIDE (POTASH)
<b>Other Means of Identification</b>	Inorganic Salt
<b>Recommended Use</b>	Drilling Fluid Additive.
<b>Supplier</b>	Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com
<b>Emergency Phone No.</b>	ChemTrec, (800) 424-9300, 24/7

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Serious eye damage/eye irritation - Category 2A

### GHS Label Elements



Signal Word:

WARNING!

Causes serious eye irritation. May cause chemical conjunctivitis.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers
Potassium chloride	7447-40-7	~100	

## SECTION 4. FIRST-AID MEASURES

### First-aid Measures

#### Inhalation

Remove from exposure to fresh air immediately. Apply oxygen or artificial respiration if required. Get medical attention immediately.

#### Skin Contact

Flush with water. Dry area thoroughly and apply skin cream or moisturizing cream. If skin irritation occurs get medical advice/attention.

#### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Obtain immediate medical attention.

#### Ingestion

If victim is conscious and alert, give 2-4 glasses of milk or water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Get prompt medical attention.

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## Immediate Medical Attention and Special Treatment

### Special Instructions

Treat symptomatically and supportively.

## SECTION 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water spray, dry chemical, carbon dioxide or appropriate foam.

### Specific Hazards Arising from the Chemical

Does not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material, in sufficient quantities and reduced particle size, is capable of creating a dust explosion.

### Special Protective Equipment and Precautions for Fire-fighters

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

### Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway. Potash is a crop nutrient and plant food, however, large spills can harm or kill vegetation.

### Methods and Materials for Containment and Cleaning Up

Ventilate area. Clean up spills immediately. Use appropriate safety equipment. Sweep up or absorb material, then place in a suitable clean, dry, closed container for disposal. Avoid generating dust.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Use with adequate ventilation. Minimize dust generation and accumulation. Avoid prolonged or repeated contact with skin. Avoid any contact with eyes, skin and clothing. Keep container tightly closed. Avoid ingestion and inhalation. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

### Conditions for Safe Storage

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container tightly closed. Store protected from moisture.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Appropriate Engineering Controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Provide adequate natural or mechanical ventilation to keep airborne concentrations low.

### Individual Protection Measures

#### Eye/Face Protection

Wear chemical safety goggles and face shield when contact is possible. Contact lenses should not be worn when handling this product.

#### Skin Protection

Wear protective clothing as required to prevent contact. Protective gloves are recommended. Ensure emergency shower and eyewash available.

#### Respiratory Protection

Use NIOSH/MSHA-approved respiratory protection equipment.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

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<b>Appearance</b>	White - brown crystals. Particle Size: Not available
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	8 - 9
<b>Melting Point/Freezing Point</b>	773 °C (melting); 773 °C (freezing)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	~ 0 mm Hg
<b>Vapour Density (air = 1)</b>	Not applicable
<b>Relative Density (water = 1)</b>	1.986 - 1.990
<b>Solubility</b>	Very soluble (more than 50 g/100 mL) in water; Not applicable (in other liquids)
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not applicable
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	Not available (kinematic)
<b>Other Information</b>	
<b>Physical State</b>	Solid
<b>Molecular Formula</b>	KCl
<b>Molecular Weight</b>	74.54
<b>Bulk Density</b>	1025 - 1200 kg/m <sup>3</sup>
<b>Surface Tension</b>	Not applicable
<b>Critical Temperature</b>	Not applicable
<b>Electrical Conductivity</b>	Not applicable
<b>Vapour Pressure at 50 deg C</b>	Not available
<b>Saturated Vapour Concentration</b>	Not available

## SECTION 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable at room temperature in closed containers under normal storage and handling conditions. Product is hygroscopic.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Incompatible materials, dust generation, excess heat, exposure to moist air or water.

### Incompatible Materials

Strong oxidizing agents, strong acids, bromine trifluoride, moisture, sulfuric acid + permanganates.  
Mildly corrosive to metals in the presence of moisture.

### Hazardous Decomposition Products

Chlorine, oxides of potassium.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

LD50 Oral Rat: 2600 mg/kg

LD50 Oral Mouse: 1500 mg/kg

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Draize test (rabbit, eye): 500 mg/24hr Mild

**Skin Corrosion/Irritation** May

cause mild irritation. **Serious**

**Eye Damage/Irritation**

Causes eye irritation. May cause chemical conjunctivitis.

**STOT (Specific Target Organ Toxicity) - Single Exposure**

**Inhalation**

High dust levels can cause respiratory tract irritation. Can produce delayed pulmonary edema.

**Ingestion**

Swallowing large amounts may cause irritation of the digestive tract including nausea, vomiting, diarrhea, abdominal cramping, irregular heartbeats, dehydration and hypertension.

Low to moderate degree of toxicity.

**STOT (Specific Target Organ Toxicity) - Repeated Exposure**

Effects may be delayed. Laboratory experiments have resulted in mutagenic effects.

**Carcinogenicity**

Not listed by NTP, IARC, OSHA, ACGIH or NIOSH

**Germ Cell Mutagenicity**

Laboratory experiments have resulted in mutagenic effects.

Unscheduled DNA synthesis: Oral, rat: 1500 micrograms/kg

Mutation in Microorganisms: Mouse, lymphocyte: 2048 mg/L

DNA Damage; Hamster, ovary: 260 mmol/L

Cytogenetic Analysis: Hamster, lung: 12 gm/L

No information was located for: Development of Offspring, Sexual Function and Fertility, Interactive Effects

## SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available. It is good practice to prevent releases into the environment.

**Toxicity**

Not Available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

Dispose of in accordance with federal, provincial and local government regulations. This product may be suitable for disposal in landfills; check with local operator.

## SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG Regulations.

**Special Precautions** Not applicable

**for User**

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

## SECTION 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations**

**Canada**

**WHMIS Classification**

Not a WHMIS controlled product.

## SECTION 16. OTHER INFORMATION

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Date of Preparation: February 24, 2016

**SDS Prepared By** Bri-Chem Supply Ltd

**Phone No.** (403) 252-5904

**Date of Preparation** February 24, 2016

**Disclaimer**

This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.

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