SECTION 1. IDENTIFICATION

Product Identifier: POTASSIUM CHLORIDE (POTASH)
Other Means of Identification: Inorganic Salt
Recommended Use: Drilling Fluid Additive.
Emergency Phone No.: ChemTrec, (800) 424-9300, 24/7

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Serious eye damage/eye irritation - Category 2A

GHS Label Elements

WARNING!

Signal Word: WARNING!
Causes serious eye irritation. May cause chemical conjunctivitis.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>%</th>
<th>Other Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium chloride</td>
<td>7447-40-7</td>
<td>~100</td>
<td></td>
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</tbody>
</table>

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.
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
Appearance
White - brown crystals. Particle Size: Not available

Odour
Odourless

Odour Threshold
Not available

pH
8 - 9

Melting Point/Freezing Point
773 °C (melting); 773 °C (freezing)

Initial Boiling Point/Range
Not available

Flash Point
Not applicable

Evaporation Rate
Not applicable

Upper/Lower Flammability or Explosive Limit
Not available (upper); Not available (lower)

Vapour Pressure
~ 0 mm Hg

Vapour Density (air = 1)
Not applicable

Relative Density (water = 1)
1.986 - 1.990

Solubility
Very soluble (more than 50 g/100 mL) in water; Not applicable (in other liquids)

Partition Coefficient, n-Octanol/Water (Log Kow)
Not applicable

Auto-ignition Temperature
Not available

Decomposition Temperature
Not available

Viscosity
Not available (kinematic)

Physical State
Solid

Molecular Formula
KCl

Molecular Weight
74.54

Bulk Density
1025 - 1200 kg/m3

Surface Tension
Not applicable

Critical Temperature
Not applicable

Electrical Conductivity
Not applicable

Vapour Pressure at 50 deg C
Not available

Saturated Vapour Concentration
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
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

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**SECTION 12. ECOLOGICAL INFORMATION**

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

**Toxicity**
- Not Available

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**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.

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**SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG Regulations.

**Special Precautions for User**
- Not applicable

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**
- Not applicable

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**SECTION 15. REGULATORY INFORMATION**

**Safety, Health and Environmental Regulations**
**Canada**

- **WHMIS Classification**
  - Not a WHMIS controlled product.
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.