Potassium Chloride

Section 1  Product Description

**Product Name:** Potassium Chloride  
**Recommended Use:** Science education applications  
**Synonyms:** Potassium Muriate, Chloride of Potash  
**Distributor:** Carolina Biological Supply Company  
2700 York Road, Burlington, NC 27215  
1-800-227-1150  
  
**Chemical Information:**  
800-227-1150 (8am-5pm (ET) M-F)  
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2  Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**WARNING**

Causes eye irritation. Harmful to aquatic life.

**GHS Classification:**  
Serious Eye Damage/Eye Irritation Category 2B, Hazardous to the aquatic environment - Acute Category 3

Section 3  Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Chloride</td>
<td>7447-40-7</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 4  First Aid Measures

**Emergency and First Aid Procedures**

**Inhalation:** In case of accident by inhalation: remove casualty to fresh air and keep at rest.

**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin Contact:** After contact with skin, wash immediately with plenty of water.

**Ingestion:** If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5  Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.

**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Fire and/or Explosion Hazards:** None Known

**Hazardous Combustion Products:** Chlorine containing gases

Section 6  Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** No adverse health affects expected from the clean-up of spilled material. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Diike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

### Section 7 Handling and Storage

**Handling:** Wash thoroughly after handling. Avoid release to the environment.

**Storage:** Keep container tightly closed in a cool, well-ventilated place.

**Storage Code:** Green - general chemical storage

### Section 8 Protection Information

#### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH (TWA)</th>
<th>(STEL)</th>
<th>OSHA PEL (TWA)</th>
<th>(STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Chloride</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### Control Parameters

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required.

**Respirator Type(s):** None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene and wear a barrier cream and/or impervious surgical style gloves. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** No information available

### Section 9 Physical Data

**Formula:** KCl

**Molecular Weight:** 74.55 g/mol

**Appearance:** White Crystals

**Odor:** None

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** 771 °C

**Boiling Point:** 1413 °C

**Flash Point:** No data available

**Flammable Limits in Air:** No data available

**Vapor Pressure:** No data available

**Evaporation Rate (BuAc=1):** No data available

**Vapor Density (Air=1):** No data available

**Specific Gravity:** 1.98

**Solubility in Water:** Soluble

**Log Pow (calculated):** No data available

**Autoignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Percent Volatile by Volume:** 0%

### Section 10 Reactivity Data

**Reactivity:** Not generally reactive under normal conditions.

**Chemical Stability:** Stable under normal conditions.

**Conditions to Avoid:** None known.

**Incompatible Materials:** Bromine Trifluoride

**Hazardous Decomposition Products:** Chlorine containing gases

**Hazardous Polymerization:** Will not occur

### Section 11 Toxicity Data

**Routes of Entry**

- Ingestion

**Symptoms (Acute):** Cardiac Arrhythmia, Seizures, Musculoskeletal system, Impaired Kidney Function

**Delayed Effects:** No data available

**Acute Toxicity:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium Chloride</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
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</table>
Potassium Chloride 7447-40-7

Oral LD50 Mouse 1500 mg/kg
Oral LD50 Rat 2600 mg/kg

Carcinogenicity:

Chemical Name: Potassium Chloride
CAS Number: 7447-40-7
IARC: Not listed
NTP: Not listed
OSHA: Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: Cardiovascular system
Chronic: No data available

Section 12 Ecological Data

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.

Mobility: This material is expected to have very high mobility in soil. It does not absorb to most soil types.

Persistence: Dissolved into water

Bioaccumulation: Bioconcentration is not expected to occur.

Degradability: Does not biodegrade readily.

Other Adverse Effects: No data

Chemical Name: Potassium Chloride
CAS Number: 7447-40-7

Eco Toxicity
Aquatic LC50 (96h) Bluegill Sunfish 1060 MG/L
Aquatic EC50 (48h) Daphnia 825 MG/L
72 HR EC50 DESMODESMUS SUBSPICATUS 2500 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: Not regulated for transport by US DOT.
Air - IATA Proper Shipping Name: Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name: Potassium Chloride
CAS Number: 7447-40-7
§ 313 Name: No
§ 304 RQ: No
CERCLA RQ: No
§ 302 TPQ: No
CAA 112(2) TQ: No

Section 16 Additional Information

Revised: 09/09/2015
Replaces: 09/03/2014
Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Hygienists</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Service Number</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response,</td>
</tr>
<tr>
<td></td>
<td>Compensation, and Liability Act</td>
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<tr>
<td>DOT</td>
<td>U.S. Department of Transportation</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>N/A</td>
<td>Not Available</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
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<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>IDLH</td>
<td>Immediately dangerous to life and health</td>
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