Material Safety Data Sheet

Section 1 – Chemical Name

Name: Potassium Chloride
Synonym: Potassium Monochloride, Potassium Muriate
CAS: 7447-40-7

Section 2 - Chemical Product

MSDS Name: Potassium Chloride
Synonym: Potassium Monochloride, Potassium Muriate.

Section 3 - COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>content</th>
<th>EINECS#</th>
</tr>
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<tbody>
<tr>
<td>7447-40-7</td>
<td>Potassium Chloride</td>
<td>100</td>
<td>231-211-8</td>
</tr>
</tbody>
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Hazard Symbols: XI
Risk Phrases: 36

Section 4 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Irritating to eyes. Hygroscopic.
Potential Health Effects
Eye:
Dust may cause mechanical irritation.
Skin:
May cause skin irritation.
Ingestion:
Ingestion of large amounts may cause gastrointestinal irritation.
May cause gastric disturbances and electrolytic imbalance.
Inhalation:
Dust is irritating to the respiratory tract. Low hazard for usual industrial handling.
Chronic:
No information found.

Section 5 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the
upper and lower eyelids. Get medical aid.

Skin:
Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation:
Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Section 6 - FIRE FIGHTING MEASURES
General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Material will not burn. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to the surrounding fire.

Extinguishing Media:
Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 7 - ACCIDENTAL RELEASE MEASURES
General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks:
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 8 - HANDLING and STORAGE
Handling:
Avoid prolonged or repeated contact with skin. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse. Keep from contact with moist air and steam.
Storage:
Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from
incompatible substances. Store protected from moisture.

**Section 9 - EXPOSURE CONTROLS, PERSONAL PROTECTION**

Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**Section 10 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Solid

Appearance: colorless to white

Odor: Odorless

pH: 7 @ 15C (saturated)

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 1420 deg C @ 760.00mm Hg

Freezing/Melting Point: 770 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: N/A

Explosion Limits, upper: N/A

Decomposition Temperature: sublimes

Solubility in water: 340 g/l (20 c)

Specific Gravity/Density: 1.984

Molecular Formula: ClK

Molecular Weight: 74.54

**Section 11 - STABILITY AND REACTIVITY**

Chemical Stability:
Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:
Incompatible materials, moisture, excess heat.

Incompatibilities with Other Materials:
May react violently with bromine trifluoride. May result in explosion with potassium permanganate and sulfuric acid.

Hazardous Decomposition Products:
Chlorine, irritating and toxic fumes and gases, potassium fume.

Hazardous Polymerization: Has not been reported.

Section 12 - TOXICOLOGICAL INFORMATION
RTECS#:
CAS# 7447-40-7: TS8050000 LD50/LC50:
CAS# 7447-40-7: Draize test, rabbit, eye: 500 mg/24H Mild; Oral, mouse: LD50 = 1500 mg/kg; Oral, rat: LD50 = 2600 mg/kg.

Carcinogenicity:
Potassium Chloride - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete information.

Section 13 - ECOLOGICAL INFORMATION
Ecotoxicity:
No data

Section 14 - DISPOSAL CONSIDERATIONS
Dispose of in a manner consistent with federal, state, and local regulations.

Section 15 - TRANSPORT INFORMATION
IATA
Not regulated as a hazardous material.
IMO
Not regulated as a hazardous material.
RID/ADR
Not regulated as a hazardous material.
Section 16 - REGULATORY INFORMATION

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: XI
Risk Phrases:
R 36 Irritating to eyes.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 39 Wear eye/face protection.

WGK (Water Danger/Protection)
CAS# 7447-40-7: 1

United Kingdom Occupational Exposure Limits

Canada
CAS# 7447-40-7 is listed on Canada’s DSL List.
CAS# 7447-40-7 is not listed on Canada’s Ingredient Disclosure List.

Exposure Limits
US FEDERAL
TSCA
CAS# 7447-40-7 is listed on the TSCA inventory.