Table of Contents

1. Chemical Product 2
2. Composition and Information on Ingredients 2
3. Hazards Identification 2
4. First Aid Measures 3
5. Fire and Explosion Data 4
6. Accidental Release Measures 5
7. Handling and Storage 5
8. Exposure Controls/ Personal Protection 6
9. Physical and Chemical Properties 6
10. Stability and Reactivity Data 7
11. Toxicological Information 8
12. Ecological Information 8
13. Disposal Considerations 9
14. References 9
15. Appendices 9
16. Revision History 10

Written by: Miguel Honora  Signature/Date: 16-10-13
Reviewed by: Nicolee Sorrenti  Signature/Date: 30-11-13
Approved by:  Signature/Date: 4-2-13
1. **Chemical Product**

<table>
<thead>
<tr>
<th><strong>Product Name:</strong></th>
<th>Potassium chloride</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical name:</strong></td>
<td>Potassium chloride</td>
</tr>
<tr>
<td><strong>Synonyms:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Chemical Formula:</strong></td>
<td>KCl</td>
</tr>
</tbody>
</table>

2. **Composition and Information on Ingredients**

<table>
<thead>
<tr>
<th><strong>Composition:</strong></th>
<th>100% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicological Data on Ingredients:</strong></td>
<td>Potassium chloride: ORAL (LD50): Acute: 2500 mg/kg [Guinea pig]. 2600 mg/kg [Rat]. 1500 mg/kg [Mouse].</td>
</tr>
</tbody>
</table>

3. **Hazards Identification**

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion and of inhalation.

**Potential Chronic Health Effects:**

*CARCINOGENIC EFFECTS:* N/A

*MUTAGENIC EFFECTS:* Mutagenic for mammalian somatic cells, bacteria and/or yeast.

*TERATOGENIC EFFECTS:* N/A

*DEVELOPMENTAL TOXICITY:* The substance may be toxic to cardiovascular system, including the blood. Repeated or prolonged exposure to the substance can damage the target organs.
4. First Aid Measures

**General measures:** Seek medical attention. Show this data sheet to a physician in attendance.

**Skin contact:** Wash with soap and water and cover the irritated skin with an emollient. Seek medical attention if irritation develops. Cold water may be used.

**Serious skin contact:** N/A

**Eye contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Seek medical attention.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention if symptoms appear.

**Serious indigestion:** N/A

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Serious inhalation:** N/A
5. Fire and Explosion Data

Flammability of the Product: Non-flammable

Auto-Ignition Temperature: Not applicable.

Flash points: Not applicable.

Flammable limits: Not applicable.

Products of Combustion: N/A

Fire Hazards in Presence of Various Substances: N/A

Explosion Hazards in Presence of Various Substances:
- Risks of explosion of the product in presence of mechanical impact: N/A.
- Risks of explosion of the product in presence of static discharge: N/A. Slightly explosive in presence of oxidizing materials.

Fire fighting media and Instructions: Not applicable

Special Remarks on Fire Hazards: N/A

Special Remarks on Explosion Hazards: May result in explosion with potassium permanganate and sulfuric acid.
### 6. Accidental Release Measures

NB: Wear appropriate protective equipment/clothing including gloves before removing any spills.

**Small spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

### 7. Handling and Storage

**Precautions:** Do not ingest or breathe in the dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture.

**Storage:** Keep container tightly closed in a cool, well-ventilated area. The substance is hygroscopic.
### 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:** N/A

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Wear safety glasses, lab coat, dust respirator, making sure to use an approved/certified respirator or equivalent and gloves.

### 9. Physical and Chemical Properties

- **Physical state and appearance:** White solid.
- **Odour:** Odourless
- **Taste:** Saline (Strong).
- **Molecular Weight:** 74.55g/mole
- **pH (1% solution/water):**
- **Boiling Point:** 1420°C (2588°F)
- **Melting Point:** 770°C (1418°F)
- **Critical Temperature:** N/A
- **Specific Gravity (Water = 1):** 1.987
- **Vapour Pressure (mmHg):** Not applicable.
- **Vapour Density:** N/A
- **Volatility:** N/A
- **Odour Threshold:** N/A
- **Water/Oil Distribution Coefficient:** N/A
- **Ionicity (in Water):** N/A
- **Dispersion Properties:** See solubility in water.
- **Solubility:** Soluble in cold water, hot water and very slightly soluble in methanol, n-octanol.
10. **Stability and Reactivity Data**

**Stability:** The product is stable.

**Corrosivity:** Non-corrosive in presence of glass.

**Instability temperature:** N/A

**Conditions of Instability:** Incompatible materials.

**Incompatibles:** Reactive with oxidizing agents, acids.

**Polymerization:** Will not occur.
### 11. Toxicological Information

**Toxicity to animals:** Acute oral toxicity (LD50): 1500 mg/kg [Mouse].

**Effects on humans:**

**Acute potential health effects:**
- Skin: May cause skin irritation
- Eye: Dust may cause eye irritation.
- Inhalation: Dust may cause respiratory tract irritation. There is a low hazard for usual industrial handling.
- Ingestion: May affect behaviour (coma, change in motor activity, listlessness, vertigo, mental confusion, paraesthesia, general weakness, flaccid paralysis), metabolism, blood (change in clotting factor, electrolytic imbalance), cardiovascular (hypotension, circulatory disturbances, cardiac arrhythmias, heart block), and respiratory, gastrointestinal (irritation of GI tract, nausea, vomiting, diarrhoea, abdominal discomfort, purging), and urinary (impairment of renal function) systems. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting, and because in the absence of pre-existing kidney damage potassium is rapidly excreted. Maximal nontoxic oral dose of KCl in man varies from 0.2g to 1 g of potassium/kg/day depending upon efficiency of individual excretory mechanism; lower doses sometimes cause impairment of renal function as shown by reduced inulin, and urea clearance.

**Chronic potential health effects:** May affect blood and cardiovascular system.

**MUTAGENIC EFFECTS:** N/A

**TERATOGENIC EFFECTS:** N/A

**DEVELOPMENTAL TOXICITY:** N/A

**Other information:** Slightly hazardous in case of skin contact (irritant), ingestion, and inhalation.

### 12. Ecological Information

**Ecotoxicity:** N/A
13. Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with local environmental control regulations.

14. References


15. Appendices

N/A
### 16. Revision History

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Amendments/ Reasons for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Initial Release</td>
</tr>
</tbody>
</table>