



# Material Safety Data Sheet

|  |  |               |   |             |   |            |   |  |
|--|--|---------------|---|-------------|---|------------|---|--|
| <p><b>NFPA</b></p>  | <p><b>HMIS</b></p> <table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table> | Health Hazard | 1 | Fire Hazard | 0 | Reactivity | 0 | <p><b>Personal Protective Equipment</b></p>  <p style="text-align: center;">See Section 15.</p> |
| Health Hazard  | 1  |               |   |             |   |            |   |  |
| Fire Hazard  | 0  |               |   |             |   |            |   |  |
| Reactivity   | 0  |               |   |             |   |            |   |  |

| Section 1. Chemical Product and Company Identification |   | Page Number: 1  |
|--|---|---|
| <b>Common Name/Trade Name</b>                          | <b>Potassium chloride</b>   |   |
| <b>Manufacturer</b>                                    | SPECTRUM LABORATORY PRODUCTS INC.<br>14422 S. SAN PEDRO STREET<br>GARDENA, CA 90248 | <b>Catalog Number(s)</b> NC-6717<br>NC-8508   |
|  |   | <b>CAS#</b> 7447-40-7   |
| <b>Commercial Name(s)</b>                              | Not available.  | <b>RTECS</b> TS8050000  |
|  |   | <b>TSCA</b> TSCA 8(b) inventory:<br>Potassium chloride  |
| <b>Synonym</b>   | Not available.  | <b>CI#</b> Not available.   |
| <b>Chemical Name</b>                                   | Potassium Chloride  | <p style="text-align: center; margin: 0;"><b>IN CASE OF EMERGENCY</b></p> <p style="text-align: center; margin: 0;"><b>CHEMTREC (24hr) 800-424-9300</b></p> <p style="text-align: center; margin: 0;">CALL (310) 516-8000</p> |
| <b>Chemical Family</b>                                 | Inorganic Salt  |   |
| <b>Chemical Formula</b>                                | KCl   |   |
| <b>Supplier</b>  | THE SCIENCE COMPANY<br>95 LINCOLN ST<br>DENVER CO 80203                             |   |

| Section 2. Composition and Information on Ingredients   |           |                          |                           |                           |             |
|---|-----------|--------------------------|---------------------------|---------------------------|-------------|
| Name  | CAS #     | Exposure Limits          |                           |                           | % by Weight |
|   |           | TWA (mg/m <sup>3</sup> ) | STEL (mg/m <sup>3</sup> ) | CEIL (mg/m <sup>3</sup> ) |             |
| 1) Potassium chloride   | 7447-40-7 |                          |                           |                           | 100         |
| <b>Toxicological Data on Ingredients</b>  |           |                          |                           |                           |             |
| <p><b>Potassium chloride:</b><br/>                 ORAL (LD50): Acute: 2500 mg/kg [Guinea pig]. 2600 mg/kg [Rat]. 1500 mg/kg [Mouse].</p> |           |                          |                           |                           |             |

| Section 3. Hazards Identification       |   |
|---|---|
| <b>Potential Acute Health Effects</b>   | Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.  |
| <b>Potential Chronic Health Effects</b> | <p><b>CARCINOGENIC EFFECTS:</b> Not available.</p> <p><b>MUTAGENIC EFFECTS:</b> Mutagenic for bacteria and/or yeast.</p> <p><b>TERATOGENIC EFFECTS:</b> Not available.</p> <p><b>DEVELOPMENTAL TOXICITY:</b> Not available.</p> <p>The substance may be toxic to blood, cardiovascular system.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage.</p> |

**Section 4. First Aid Measures**

|                             |  |
|-----------------------------|--|
| <b>Eye Contact</b>          | 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. Get medical attention.   |
| <b>Skin Contact</b>         | Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.  |
| <b>Serious Skin Contact</b> | Not available.   |
| <b>Inhalation</b>           | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.   |
| <b>Serious Inhalation</b>   | Not available.   |
| <b>Ingestion</b>            | 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. Get medical attention if symptoms appear. |
| <b>Serious Ingestion</b>    | Not available.   |

**Section 5. Fire and Explosion Data**

|  |   |
|--|---|
| <b>Flammability of the Product</b>                         | Non-flammable.  |
| <b>Auto-Ignition Temperature</b>                           | Not applicable.   |
| <b>Flash Points</b>  | Not applicable.   |
| <b>Flammable Limits</b>                                    | Not applicable.   |
| <b>Products of Combustion</b>                              | Not available.  |
| <b>Fire Hazards in Presence of Various Substances</b>      | Not applicable.   |
| <b>Explosion Hazards in Presence of Various Substances</b> | Risks of explosion of the product in presence of mechanical impact: Not available.<br>Risks of explosion of the product in presence of static discharge: Not available.<br>Slightly explosive in presence of oxidizing materials. |
| <b>Fire Fighting Media and Instructions</b>                | Not applicable.   |
| <b>Special Remarks on Fire Hazards</b>                     | Not available.  |
| <b>Special Remarks on Explosion Hazards</b>                | May result in explosion with potassium permanganate and sulfuric acid.  |

**Section 6. Accidental Release Measures**

|                    |  |
|--------------------|--|
| <b>Small Spill</b> | 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. |
| <b>Large Spill</b> | 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.                                 |

**Section 7. Handling and Storage**

|                    |   |
|--------------------|---|
| <b>Precautions</b> | Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, moisture. |
| <b>Storage</b>     | Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic  |

**Section 8. Exposure Controls/Personal Protection**

|   |   |
|---|---|
| <b>Engineering Controls</b>                         | 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. |
| <b>Personal Protection</b>                          | Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.   |
| <b>Personal Protection in Case of a Large Spill</b> | Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.                    |
| <b>Exposure Limits</b>                              | Not available.  |

**Section 9. Physical and Chemical Properties**

|                                      |  |              |                     |
|--------------------------------------|--|--------------|---------------------|
| <b>Physical state and appearance</b> | Solid. (Crystals solid. Crystalline powder. Granular powder)                       | <b>Odor</b>  | Odorless.           |
| <b>Molecular Weight</b>              | 74.55 g/mole   | <b>Taste</b> | Saline. (Strong.)   |
| <b>pH (1% soln/water)</b>            | Not available.   | <b>Color</b> | Colorless to White. |
| <b>Boiling Point</b>                 | 1420°C (2588°F)  |              |                     |
| <b>Melting Point</b>                 | 770°C (1418°F)   |              |                     |
| <b>Critical Temperature</b>          | Not available.   |              |                     |
| <b>Specific Gravity</b>              | 1.987 (Water = 1)  |              |                     |
| <b>Vapor Pressure</b>                | Not applicable.  |              |                     |
| <b>Vapor Density</b>                 | Not available.   |              |                     |
| <b>Volatility</b>                    | Not available.   |              |                     |
| <b>Odor Threshold</b>                | Not available.   |              |                     |
| <b>Water/Oil Dist. Coeff.</b>        | Not available.   |              |                     |
| <b>Ionicity (in Water)</b>           | Not available.   |              |                     |
| <b>Dispersion Properties</b>         | See solubility in water.   |              |                     |
| <b>Solubility</b>                    | Soluble in cold water, hot water.<br>Very slightly soluble in methanol, n-octanol. |              |                     |

**Section 10. Stability and Reactivity Data**

|  |   |
|--|---|
| <b>Stability</b>                               | The product is stable.  |
| <b>Instability Temperature</b>                 | Not available.  |
| <b>Conditions of Instability</b>               | Incompatible materials  |
| <b>Incompatibility with various substances</b> | Reactive with oxidizing agents, acids.  |
| <b>Corrosivity</b>                             | Non-corrosive in presence of glass.   |
| <b>Special Remarks on Reactivity</b>           | Hygroscopic.<br>Incompatible with KMnO <sub>4</sub> , H <sub>2</sub> SO <sub>4</sub> , BrF <sub>3</sub> , and BrCl <sub>3</sub> . May react violently with BrF <sub>3</sub> . |
| <b>Special Remarks on Corrosivity</b>          | Not available.  |
| <b>Polymerization</b>                          | Will not occur.   |

**Section 11. Toxicological Information**

|   |  |
|---|--|
| <b>Routes of Entry</b>                                  | Inhalation. Ingestion.   |
| <b>Toxicity to Animals</b>                              | Acute oral toxicity (LD50): 1500 mg/kg [Mouse].  |
| <b>Chronic Effects on Humans</b>                        | <b>MUTAGENIC EFFECTS:</b> Mutagenic for bacteria and/or yeast.<br>May cause damage to the following organs: blood, cardiovascular system.  |
| <b>Other Toxic Effects on Humans</b>                    | Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.  |
| <b>Special Remarks on Toxicity to Animals</b>           | Not available.   |
| <b>Special Remarks on Chronic Effects on Humans</b>     | May affect genetic material.<br>Passes through the placental barrier in animal.  |
| <b>Special Remarks on other Toxic Effects on Humans</b> | Acute Potential Health Effects:<br>Skin: May cause skin irritation Eye:<br>Dust may cause eye irritation.<br>Inhalation: Dust may cause respiratory tract irritation. Low hazard for usual industrial handling<br>Ingestion: May affect behavior (coma, change in motor activity, listlessness, vertigo, mental confusion, paresthesias, 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, diarrhea, 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.<br>Chronic Potential Health Effects: May affect blood and cardiovascular system. |

**Section 12. Ecological Information**

|  |   |
|--|---|
| <b>Ecotoxicity</b>                                       | Not available.  |
| <b>BOD5 and COD</b>                                      | Not available.  |
| <b>Products of Biodegradation</b>                        | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| <b>Toxicity of the Products of Biodegradation</b>        | The product itself and its products of degradation are not toxic.   |
| <b>Special Remarks on the Products of Biodegradation</b> | Not available.  |

**Section 13. Disposal Considerations**

|                       |  |
|-----------------------|--|
| <b>Waste Disposal</b> | Waste must be disposed of in accordance with federal, state and local environmental control regulations. |
|-----------------------|--|

**Section 14. Transport Information**

|   |   |
|---|---|
| <b>DOT Classification</b>               | Not a DOT controlled material (United States).                                      |
| <b>Identification</b>                   | Not applicable.   |
| <b>Special Provisions for Transport</b> | Not applicable.   |
| <b>DOT (Pictograms)</b>                 |  |

**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**

TSCA 8(b) inventory: Potassium chloride

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  
 EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. (EINECS no. 231-211-8 ).  
 Canada: Listed on Canadian Domestic Substance List (DSL).  
 China: Listed on National Inventory.  
 Japan: Listed on National Inventory (ENCS).  
 Korea: Listed on National Inventory (KECI).  
 Philippines: Listed on National Inventory (PICCS).  
 Australia: Listed on AICS.

**Other Classifications**

**WHMIS (Canada)** Not controlled under WHMIS (Canada).  
**DSCL (EEC)** This product is not classified according to the EU regulations. Not applicable.

**HMIS (U.S.A.)**

|                     |   |
|---------------------|---|
| Health Hazard       | 1 |
| Fire Hazard         | 0 |
| Reactivity          | 0 |
| Personal Protection | E |

**National Fire Protection Association (U.S.A.)**

Health  Flammability  
 Reactivity  
 Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



**ADR (Europe) (Pictograms)**



**Protective Equipment**



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Safety glasses.

### Section 16. Other Information

**MSDS Code** P4240

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 6/14/2012.

Verified by Sonia Owen.

Printed 6/14/2012.

CALL (310) 516-8000

#### Notice to Reader

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*