1. IDENTIFICATION

Product identifier

Product code: R1050
Product Name: RUBIDIUM CHLORIDE, HIGH PURITY

Other means of identification
Synonyms: No information available
CAS #: 7791-11-9
RTECS #: VL8575000
CI#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: No information available.
Uses advised against: No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com
Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight-%</th>
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<tbody>
<tr>
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<td>7791-11-9</td>
<td>100</td>
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</table>

4. FIRST AID MEASURES

**First aid measures**

**General Advice:** National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
- May cause eye irritation
- May cause skin irritation
- May cause irritation of respiratory tract

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

**First-Aid Providers:** Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous combustion products**
- If it is involved in a fire the following can be released: hydrogen chloride gas.

**Specific hazards**
- No information available.

**Special Protective Actions for Firefighters**
Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Technical Measures/Precautions:** Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

Strong oxidizing agents

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**National occupational exposure limits**

#### United States

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
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#### Canada

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<th>Canada - British Columbia</th>
<th>Canada - Ontario</th>
<th>Canada - Quebec</th>
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**Product code:** R1050  **Product name:** RUBIDIUM CHLORIDE, HIGH PURITY
Australia and Mexico

<table>
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<th>Mexico</th>
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<tbody>
<tr>
<td>Rubidium Chloride</td>
<td>7791-11-9</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering measures to reduce exposure:**
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.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:** Goggles

**Skin and body protection:** Long sleeved clothing, apron, Gloves

**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Odor: No information available</td>
<td>Taste No information available.</td>
<td>Formula RbCl</td>
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<tr>
<td>Molecular/Formula weight (g/mole): 120.92</td>
<td>Flammability (solid, gas) no data available</td>
<td>Flashpoint (°C/°F): No information available</td>
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<td>Flash Point Tested according to: Not available</td>
<td>Autoignition Temperature (°C/°F): No information available</td>
<td>Lower Explosion Limit (%): No information available</td>
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<td>Upper Explosion Limit (%): No information available</td>
<td>Melting point/range(°C/°F): 715-718 °C/1319-1324 °F</td>
<td>Decomposition temperature(°C/°F): 230 °C/446 °F</td>
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<td>Boiling point/range(°C/°F): 1390 °C/2534 °F</td>
<td>Bulk density: No information available</td>
<td>Density (g/cm3): No information available</td>
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<td>Specific gravity: 2.76</td>
<td>pH No information available</td>
<td>Vapor pressure @ 20°C (kPa): No information available</td>
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</table>

**Product code:** R1050 **Product name:** RUBIDIUM CHLORIDE, HIGH PURITY

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10. STABILITY AND REACTIVITY

Reactivity
May react with strong oxidizers

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Avoid dust formation. Incompatible materials.

Incompatible Materials: Strong oxidizing agents

Hazardous decomposition products: No information available.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Inhalation. Ingestion.

Acute Toxicity

Component Information

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<tr>
<th>Rubidium Chloride</th>
<th>CAS No</th>
<th>7791-11-9</th>
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<td>LD50/oral/rat = 4440 mg/kg Oral LD50 Rat</td>
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<td>LD50/oral/mouse = 3800 mg/kg</td>
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<td>LD50/dermal/rat = No information available</td>
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Product Information

Product code: R1050
Product name: RUBIDIUM CHLORIDE, HIGH PURITY
LD50/oral/rat = Value - Acute Tox = 4440 mg/kg

LD50/oral/mouse = Value - Acute Tox Oral = 3800 mg/kg

LD50/dermal/rabbit Value - Acute Tox = No information available

LD50/dermal/rat VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation in sensitive individuals.

Eye Contact: May cause eye irritation.

Inhalation May cause respiratory tract irritation.

Ingestion Health injuries are not known or expected under normal use.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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</table>

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Product code: R1050 Product name: RUBIDIUM CHLORIDE, HIGH PURITY
Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available
Bioaccumulative potential: No information available.
Mobility in soil No information available
Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

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<td>7791-11-9</td>
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</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: No information available

Product code: R1050 Product name: RUBIDIUM CHLORIDE, HIGH PURITY
15. REGULATORY INFORMATION

International Inventories

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>China IECSC</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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<td>Present 232-240-9</td>
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U.S. Regulations

Product code: R1050
Product name: RUBIDIUM CHLORIDE, HIGH PURITY

**Chemicals Known to the State of California to Cause Cancer:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
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<th>Developmental Toxicity</th>
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**CERCLA/SARA**

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
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<tbody>
<tr>
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**U.S. TSCA**

<table>
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<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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</thead>
<tbody>
<tr>
<td>Rubidium Chloride</td>
<td>7791-11-9</td>
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<td>Not Applicable</td>
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</tbody>
</table>

**Canada**

**WHIMIS 2015 - GHS Classifications**

WHMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

**Canada Hazardous Products Regulation**

This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

**DSL/NDSL**

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<th>Component</th>
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<th>CAS No</th>
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<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
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<td>Component</td>
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<td>CEPA Schedule I - Toxic Substances</td>
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**EU Classification**

**EU GHS - SV - CLP 1272/2008**

<table>
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<th>Component</th>
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**Product code:** R1050  **Product name:** RUBIDIUM CHLORIDE, HIGH PURITY
Rubidium Chloride  
7791-11-9  

EU - CLP (1272/2008)

**R-phrase(s)**
not determined (not applicable)

**S -phrase(s)**
none

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<th>Safety Phrases</th>
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The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
None

### 16. OTHER INFORMATION

**Preparation Date:** 7/31/2017  
**Revision date:** 3/27/2019  
**Prepared by:** Sonia Owen

**Disclaimer:**
All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet