Section 1 - Chemical Product and Company Identification

MSDS Name: Rubidium Carbonate, 99%
Catalog Numbers: AC317150000, AC317150250, AC317151000
Synonyms: Dirubidium Carbonate; Dirubidium Monocarbonate; Carbonic Acid, Dirubidium Salt.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaalana 3a
2440 Geel, Belgium
Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 584-09-8
Chemical Name: Rubidium Carbonate
%: 99
EINECS#: 209-530-9

Hazard Symbols: XI
Risk Phrases: 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! May be harmful if swallowed, inhaled, or absorbed through the skin. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

Potential Health Effects

Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.
Chronic: Effects may be delayed.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin:
Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:
Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Section 5 - 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.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits: Not available
Lower:
Explosion Limits: Not available
Upper:
NFPA Rating: health: 2; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures
General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage
Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Avoid breathing dust.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubidium Carbonate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Rubidium Carbonate: None listed

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Powder
Color: white
Odor: none reported  
PH: Not available  
Vapor Pressure: Not available  
Vapor Density: Not available  
Evaporation Rate: Not available  
Viscosity: Not available  
Boiling Point: Not available  
Freezing/Melting Point: 837 deg C (1,538.60°F)  
Decomposition Temperature: Not available  
Solubility in water: 4500 g/l (20°C)  
Specific Gravity/Density:  
Molecular Formula: CO3Rb2  
Molecular Weight: 230.95  

Section 10 - Stability and Reactivity  

Chemical Stability:  
May decompose on exposure to air. Air sensitive. Hygroscopic: absorbs moisture or water from the air.  
Conditions to Avoid:  
Incompatible materials, dust generation, exposure to air, exposure to moist air or water.  
Incompatibilities with Other Materials:  
Strong oxidizing agents.  
Hazardous Decomposition:  
Carbon monoxide, carbon dioxide.  
Hazardous Polymerization:  
Has not been reported.  

Section 11 - Toxicological Information  

RTECS#: CAS# 584-09-8: FG0650000  
RTECS:  
LD50/LC50: CAS# 584-09-8: Oral, rat: LD50 = 2625 mg/kg;  
Carcinogenicity: Rubidium Carbonate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
Other: See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.  

Section 12 - Ecological Information  

Other: Do not empty into drains.  

Section 13 - Disposal Considerations  

Dispose of in a manner consistent with federal, state, and local regulations.  

Section 14 - Transport Information  

US DOT  
Shipping Name: Not Regulated.  
Hazard Class:  
UN Number:  
Packing Group:  
Canada TDG  
Shipping Name: Not available  
Hazard Class:  
UN Number:  
Packing Group:  

Section 15 - Regulatory Information  

European/International Regulations  
European Labeling in Accordance with EC Directives  
Hazard Symbols: XI
Risk Phrases:
R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)
CAS# 584-09-8: 1

Canada
CAS# 584-09-8 is listed on Canada's NDSL List
Canadian WHMIS Classifications: D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 584-09-8 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
CAS# 584-09-8 is listed on the TSCA Inventory.

Section 16 - Other Information
MSDS Creation Date: 7/28/1997
Revision #9 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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