Material Safety Data Sheet
Strontium nitrate

MSDS# 22010

Section 1 - Chemical Product and Company Identification

MSDS Name: Strontium nitrate
Catalog Numbers: AC222560000, AC222560010, AC222560250, AC222562500, AC315170000, AC315170025, AC315171000, AC315175000, S549-100, S549-500
Synonyms: Strontium nitrate anhydrous.

Company Identification:
For information in the US, call:
Emergency Number US:
CHEMTREC Phone Number, US:

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>10042-76-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name:</td>
<td>Strontium nitrate</td>
</tr>
<tr>
<td>%:</td>
<td>99+</td>
</tr>
<tr>
<td>EINECS#:</td>
<td>233-131-9</td>
</tr>
</tbody>
</table>

Hazard Symbols: XN O
Risk Phrases: 22 36/37/38 8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! Strong oxidizer. Contact with other material may cause a fire. Harmful if swallowed. Causes eye, skin, and respiratory tract irritation. Target Organs: Blood, respiratory system, gastrointestinal system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May be harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea and vomiting.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Chronic: May cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death.

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 immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid immediately.
Inhalation:
Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to Physician:
Treat symptomatically and supportively.

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. Strong oxidizer. Contact with other material may cause fire. Substance is noncombustible.

Extinguishing Media:
Use water spray to cool fire-exposed containers. Use water only! Contact professional fire-fighters immediately.

Autoignition Temperature: Not applicable.
Flash Point: Not applicable.

Explosion Limits:
Lower: Not available
Upper: Not available

NFPA Rating: OX

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Avoid generating dusty conditions. Remove all sources of ignition. Carefully scoop up and place into appropriate disposal container. Provide ventilation. Do not use combustible materials such as paper towels to clean up spill. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid contact with clothing and other combustible materials. Avoid ingestion and inhalation. Use with adequate ventilation. Use only in a chemical fume hood.

Storage: Do not store near combustible materials. Store in a cool, dry place. Store in a tightly closed container.

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>Strontium nitrate</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------------</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------------</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------------------</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Strontium nitrate: 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. Use only under a chemical fume hood.

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 gloves to prevent skin exposure.

Clothing: Wear a chemical apron. Wear appropriate clothing to prevent skin exposure.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystals
Color: white
Odor: odorless
pH: 5.0 - 7.0 (5% aq.sol.)
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 645 deg C (1,193.00°F)
Freezing/Melting Point: 570 deg C (1,058.00°F)
Decomposition Temperature: Not available
Solubility in water: 660 g/l water (20°C)
Specific Gravity/Density: 2.990
Molecular Formula: Sr(NO₃)₃
Molecular Weight: 211.63

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, dust generation, excess heat, combustible materials, organic materials, exposure to moist air or water.
Incompatibilities with Other Materials: Reducing agents, strong acids, active metals, phosphorus, sulfur, combustible and flammable materials (e.g. alkyl resins, asphalt, gasoline, grease, methyl acetone, polystyrene, polyurethane).

Hazardous Decomposition Products: Nitrogen oxides.

Section 11 - Toxicological Information

RTECS#: CAS# 10042-76-9: WK9800000
LD50/LC50:
RTECS: 
CAS# 10042-76-9: Oral, mouse: LD₅₀ = 1028 mg/kg;
Oral, rabbit: LD₅₀ = 3865 mg/kg;
LD₅₀/LC₅₀: Oral, rabbit: LD₅₀ = 1600 mg/kg;
Oral, rat: LD₅₀ = 1892 mg/kg;

Carcinogenicity: Strontium nitrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Section 12 - Ecological Information

Other: Avoid entering into waters or underground water.

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Shipping Name: STRONTIUM NITRATE
Hazard Class: 5.1
UN Number: UN1507
Packing Group: III
Canada TDG
Shipping Name: STRONTIUM NITRATE
Hazard Class: 5.1
UN Number: UN1507
Packing Group: III

Section 15 - Regulatory Information
European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN O

Risk Phrases:
- R 22 Harmful if swallowed.
- R 36/37/38 Irritating to eyes, respiratory system and skin.
- R 8 Contact with combustible material may cause fire.

Safety Phrases:
- S 17 Keep away from combustible material.
- 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# 10042-76-9: 1

Canada

CAS# 10042-76-9 is listed on Canada's DSL List
Canadian WHMIS Classifications: C, D1B, 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# 10042-76-9 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 10042-76-9 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997
Revision #8 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 merchantability 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.

--------------------------------------------------------------------------------------------------