

Common Name: **STRONTIUM NITRATE**

Synonyms: Strontium Dinitrate

CAS No: 10042-76-9

Molecular Formula: $\text{Sr}(\text{NO}_3)_2$

RTK Substance No: 1743

Description: Odorless, colorless or white, crystalline powder

HAZARD DATA

| Hazard Rating | Firefighting | Reactivity |
|--|---|--|
| <p>2 - Health</p> <p>0 - Fire</p> <p>0 - Reactivity</p> <p>DOT#: UN 1507</p> <p>ERG Guide #: 140</p> <p>Hazard Class: 5.1 (Oxidizer)</p> | <p>Strontium Nitrate is not combustible, but it is a STRONG OXIDIZER that enhances the combustion of other substances.</p> <p>Use water only. DO NOT USE CHEMICAL, FOAM or CO_2 as extinguishing agents.</p> <p>POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Nitrogen Oxides</i>.</p> <p>CONTAINERS MAY EXPLODE IN FIRE.</p> <p>Use water spray to keep fire-exposed containers cool.</p> <p>Strontium Nitrate may ignite combustibles (wood, paper and oil).</p> <p>Prolonged exposure to heat, shock or friction may cause Strontium Nitrate to explode.</p> | <p>Strontium Nitrate and ALKYL ESTERS may form explosive <i>Alkyl Nitrates</i>.</p> <p>Strontium Nitrate may react violently with REDUCING AGENTS (such as LITHIUM, SODIUM, ALUMINUM and their HYDRIDES).</p> <p>Strontium Nitrate is not compatible with COMBUSTIBLE MATERIALS; ORGANIC MATERIALS; HALOGENS; METALS; METAL SALTS; and STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC).</p> |

SPILL/LEAKS

Isolation Distance:

Spill: 25 meters (75 feet)

Fire: 800 meters (1/2 mile)

Collect powdered material in the most convenient and safe manner and place into sealed containers for disposal.

DO NOT wash into sewer.

Strontium Nitrate can persist indefinitely in water.

PHYSICAL PROPERTIES

| | |
|--------------------------|------------------|
| Odor Threshold: | Odorless |
| Flash Point: | Nonflammable |
| Specific Gravity: | 2.98 (water = 1) |
| Water Solubility: | Soluble |
| Boiling Point: | 1,193°F (645°C) |
| Melting Point: | 1,058°F (570°C) |
| Molecular Weight: | 211.6 |

EXPOSURE LIMITS

No occupational exposure limits have been established for **Strontium Nitrate**.

The Protective Action Criteria values are:

PAC-1 = 30 mg/m³

PAC-2 = 250 mg/m³

PAC-3 = 500 mg/m³

PROTECTIVE EQUIPMENT

| | |
|--------------------|---|
| Gloves: | Nitrile and Natural Rubber |
| Coveralls: | Tyvek® |
| Respirator: | Full facepiece APR with High efficiency filters >30 mg/m ³ - SCBA |

HEALTH EFFECTS

| | |
|--------------------|--|
| Eyes: | Irritation |
| Skin: | Irritation |
| Inhalation: | Nose, throat and lung irritation with coughing, wheezing and shortness of breath |

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.