



# Super Conductor Materials, Inc.

391 Spook Rock Industrial Park, Suffern, NY 10901 · 845.368.0240 · www.scm-inc.com

Chemtrec: (800) 424-9300

Poison Center: (800) 562-8236

Revision Date: January 8<sup>th</sup>, 2019

## **SAFETY DATA SHEET**

Identity: Strontium Sulfide

Formula: SrS

### SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 119.68

CAS #	OSHA PEL	ACGIH TLV	%
1314-96-1	NE	NE	0.0-100.0%

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: N/A

Melting Point: >2000.00°C (>3632°F)

Vapor Pressure (vs. air or mmHg): N/A

Specific Gravity (Water=1): 3.70 g/cm<sup>3</sup> at 15.0°C

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Slightly soluble /

Decomposes in acids

*Appearance and odor:* light gray powder and pieces, with an odor of hydrogen sulfide in moist air or rotten eggs.

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

*Method Used:* Unknown

*Explosive Limits:* LEL: N/A

UEL: N/A

*Extinguishing Media:* Use suitable extinguishing agent for surrounding material and type of fire

#### *Special Fire Fighting Procedures:*

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

#### *Unusual Fire and Explosion Hazards:*

–When heated to decomposition, strontium sulfide may emit toxic fumes of oxides of sulfur.



SECTION V - REACTIVITY DATA

*Stability:* Stable

*Conditions to Avoid (instability):* None

*Incompatibility (Materials to avoid):* Acids, water, moisture, steam and lead (IV) oxide

*Hazardous Decomposition or Byproducts:* Hydrogen sulfide and oxides of sulfur

*Hazardous Polymerization:* Will not occur

*Conditions to avoid (hazardous polymerization):* None

SECTION VI - HEALTH HAZARD DATA

*Routes of entry:* Inhalation? Yes      Skin? Yes      Eyes? Yes      Ingestion? Yes      Other? No

To the best of our knowledge the chemical, physical and toxicological properties of strontium sulfide have not been thoroughly investigated and recorded.

Strontium compounds: The strontium ion has a low order of toxicity. It is chemically and biologically similar to calcium. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Sulfides have variable toxicity. The alkaline sulfides (potassium, calcium, ammonium, and sodium) are similar in action to alkalies. They cause softening and irritation of the skin. If ingested they are corrosive and irritating through the liberation of hydrogen sulfide and free alkali. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

*Signs and Symptoms of Overexposure:*

*Inhalation:* May cause a red, dry throat, coughing, irritation of the nose, excessive salivation, vomiting, colic, diarrhea and possibly respiratory failure.

*Ingestion:* May cause burning sensation in mouth, chest and stomach, pain in swallowing, stomach cramps, excessive salivation, vomiting, colic, diarrhea and possibly respiratory failure.

*Skin:* May cause redness, chemical burns, inflammation and itching.

*Eye:* May cause redness, inflammation, chemical burns, itching and watering.

*Health Hazards (Acute and Chronic):*

*Inhalation:*

Acute: SEVERE IRRITANT AND CORROSIVE. Poison by inhalation.

Chronic: May cause pulmonary edema.

*Ingestion:*

Acute: SEVERE IRRITANT AND CORROSIVE. Poison by ingestion. May cause severe irritation to the gastrointestinal tract.

Chronic: No chronic health effects recorded.

*Skin:*

Acute: SEVERE IRRITANT AND CORROSIVE to moist skin. May cause softening and irritation.

Chronic: No chronic health effects recorded.



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### *Eye:*

Acute: SEVERE IRRITANT AND CORROSIVE.

Chronic: No chronic health effects recorded.

*Target Organs:* No target organs recorded

*Carcinogenicity:* NTP? No IARC Monographs? No OSHA Regulated? No

*Medical Conditions Aggravated by Exposure:* Pre-existing respiratory and skin disorder

### *Emergency and First Aid Procedures:*

*Inhalation:* Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

*Ingestion:* Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

*Skin:* Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

*Eye:* Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

### *Steps to be taken in case material is released or spilled:*

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

### *Waste disposal method:*

Dispose of in accordance with state, local, and federal regulations.

### *Hazard Label Information:*

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

*Precautions:* Strontium sulfide is hygroscopic. It may react with water, moisture and steam. Handle and store in a controlled environment in an inert gas, such as argon, away from water/moisture, and oxidizing agents.

## SECTION VIII - CONTROL MEASURES

### *Protective Equipment Summary (Hazard Label Information):*

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

### *Ventilation:*

Local Exhaust: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels

Special: Handle in a controlled atmosphere

Mechanical (General): Not recommended

Other: Handle in an inert gas such as argon



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*Work/Hygienic/Maintenance Practices:*

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established
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