Material Safety Data Sheet / Safety Data sheet
Strontium Peroxide

Section 1: Chemical Product Identifier and Synonyms

Product Name: Strontium Peroxide

UN Number: 1509

CAS Number: 1314-18-7

Synonym: Strontium Dioxide

Chemical Formula: SrO_2

Section 2: Composition and Information on Ingredients

Composition

Name	CAS Number:	% By Weight
Strontium Peroxide	1314-18-7	>100%

Toxicology Data On Ingredients: Strontium Peroxide LD50: Not Available. LC50: Not Available

Section 3: Hazards Identification

Potential Acute Health Effects:
Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound.

Potential Chronic Health Effects:
This product has no known chronic effects. Repeated or prolong exposure to this compound is not known to aggravate medical conditions.

Section 4: First Aid Measures

Eye Contact:
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Skin Contact:
In case of contact, flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.
Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion:
If swallowed, call a physician immediately.

Section 5: Fire and Explosion Data

Flammability of the Product: This product is Non-Flammable.
Auto-Ignition Temperature: Not applicable.
Flash Points: Not applicable.
Flammable Limits: Not applicable.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Not applicable.
Explosion Hazards in Presence of Various Substances: Not available.
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions: Use extinguishing media appropriate to surrounding fire conditions. Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. OXIDIZER.

Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: May accelerate combustion. Contact with other material may cause fire.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill:
Oxidizing material. Poisonous solid. Stop leak if without risk. Do not get water inside container. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Use water spray to reduce vapours. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Do not ingest. Do not breathe dust. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as combustible materials, organic materials, acids.

Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles.

Section 8: Exposure Controls / Personal Protection

Engineering Controls:

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.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Powder.

Odour: Odourless.

Taste: Not available.

Molecular Weight: 119-63 g/mole

Colour: Tan to off white.

pH (1% soln/water): Insoluble.

Boiling Point: Decomposes 215°C

Melting Point: Decomposes 215°C

Critical Temperature: Not available.

Specific Gravity: 4.56 (Water = 1)

Vapour Pressure: Not available.
Vapour Density: Not available.
Volatility: Not available.
Odour Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.
Solubility: Not available.

Section 10: Stability and Reactivity Data

Stability: The product is stable under normal conditions.
Instability Temperature: Not available.
Conditions of Instability: Excessive temperatures
Incompatibility with various substances: Reducing Agents, Organic Materials, Finely Powdered Metals Strontium Peroxide is moisture and air sensitive.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Eye contact. Ingestion. Inhalation. Skin contact.
Toxicity to Animals: (LD50): Not available. LC50: Not available. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Chronic Effects on Humans: This product has no known chronic effects. Repeated or prolong exposure to this compound is not known to aggravate medical conditions.
Other Toxic Effects on Humans: Slightly hazardous in case of ingestion, of inhalation.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Irritating to the skin and eyes on contact. Inhalation will cause irritation to the lungs and mucus membrane. Irritation to the eyes will cause watering and redness. Reddening, scaling, and itching are characteristics of skin inflammation. Follow safe industrial hygiene practices and always wear protective equipment when handling this compound

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.
Products of Biodegradation: Not available.
Toxicity of the Products of Biodegradation: Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.
Special Remarks on the Products of Biodegradation: The products of degradation are as toxic as the original product.

Section 13: Disposal Information

Waste Disposal: Dispose of in accordance with local regulations

Section 14: Transport Information

DOT Classification: Class: 5.1

Identification: Strontium Peroxide, UN Number: 1509 PG:II

Special Provisions for Transport: Label Code: 5.1

Section 15: Regulatory Information

Regulations: Labelling according to Regulation (EC) No 1272/2008.

Section 16: Other Information

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. The author will not be held liable for any damage or injury caused by this product and does not obviate the requirement for end users to carry out their own workplace and specific use risk assessment.

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