

# MATERIAL SAFETY DATA SHEET

## STRONTIUM PEROXIDE

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name:	Strontium Peroxide
CAS Number:	1314-18-7
EC Number:	215-224-6

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use:	Laboratory chemicals, Synthesis of substances
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#### 1.3 Details of the supplier of the safety data sheet

Company name:	East Harbour Group Ltd Miranda House, The Quay Harwich, Essex, CO12 3HH United Kingdom
Telephone:	+44 (0) 333 242 0100
Email:	<a href="mailto:info@eastharbourgroup.com">info@eastharbourgroup.com</a>

#### 1.4 Emergency telephone number

Emergency telephone:	+44 (0) 333 242 0100 (U.K office hours only)
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### Section 2: Hazardous identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing solids (Category 2), H272

Skin irritation (Category 2),

H315 Serious eye damage (Category 1),

H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

Pictogram



Signal Word

Danger

#### Hazard Statement(s)

H272	May intensify fire, oxidizer.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

#### Precautionary statement(s)

P210	Keep away from heat.
P220	Keep/Store away from clothing/ combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

## Section 3: Composition/information on ingredients

### 3.1 Substances

Formula:	O <sub>2</sub> Sr
Molecular weight:	119.62 g/mol
CAS-No.:	1314-18-7
EC-No.:	215-224-6

### Hazardous components

Component	Classification	Concentration
Strontium peroxide	Ox. Sol. 2; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H272, H315, H318, H335	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16

## Section 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## Section 5: Fire-fighting measures

### 5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Strontium oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers

## Section 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains

### 6.3. Methods and material for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection. For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Components with workplace control parameters Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3 Personal protective equipment

#### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If the full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Do not let product enter drains.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: powder
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available

e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	4.56 g/mL at 25 °C (77 °F)
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	The substance or mixture is classified as oxidizing with the category 2.

## 9.2 Other safety information

No data available

## Section 10: Stability and Reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical Stability</b>	Stable under recommended storage conditions
<b>10.3 Possibility of hazardous reactions</b>	No data available
<b>10.4 Conditions to avoid</b>	Avoid moisture. Air
<b>10.5 Incompatible materials</b>	Organic materials, powdered metals
<b>10.6 Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. - Strontium oxides Other decomposition products - No data available In the event of fire: see section 5

## Section 11: Toxicological Information

### 11.1 Information on toxicological effects

Acute toxicity	No data available (Strontium peroxide)
Inhalation:	No data available (Strontium peroxide)
Dermal:	No data available (Strontium peroxide)
Skin corrosion/irritation	No data available (Strontium peroxide)
Serious eye damage/eye irritation	No data available (Strontium peroxide)
Respiratory or skin sensitisation	No data available (Strontium peroxide)
Germ cell mutagenicity	No data available (Strontium peroxide)

### Carcinogenicity

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

<b>Reproductive toxicity</b>	No data available (Strontium peroxide)
Specific target organ toxicity - single exposure	
<b>Inhalation</b>	May cause respiratory irritation. (Strontium peroxide)
Specific target organ toxicity - repeated exposure	No data available
<b>Aspiration hazard</b>	No data available (Strontium peroxide)

#### Additional Information

RTECS: Not available

Cough, Shortness of breath, Headache, Nausea, Vomiting, Absorption into the body leads to the formation of methaemoglobin which in delayed 2 to 4 hours or longer. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Strontium peroxide)

### Section 12: Ecological Information

<b>12.1 Toxicity</b>	No data available
<b>12.2 Persistence and degradability</b>	No data available
<b>12.3 Bioaccumulative potential</b>	No data available
<b>12.4 Mobility in soil</b>	No data available
<b>12.5 Results of PBT and vPvB assessment</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
<b>12.6 Other adverse effects</b>	No data available

### Section 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

##### Contaminated packaging

Dispose of as unused product.

### Section 14: Transport Information

#### DOT (US)

UN number: 1509 Class: 5.1 Packing group: II  
Proper shipping name: Strontium peroxide  
Poison Inhalation Hazard: No

#### IMDG

UN number: 1509 Class: 5.1 Packing group: II EMS-No: F-G, S-Q  
Proper shipping name: STRONTIUM PEROXIDE

#### IATA

UN number: 1509 Class: 5.1 Packing group: II  
Proper shipping name: Strontium peroxide

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## Section 15: Regulatory Information

### SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards:

Reactivity Hazard, Acute Health Hazard

### Massachusetts Right to Know Components

Strontium peroxide	CAS-No. 1314-18-7	Revision Date 1993-04-24
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### Pennsylvania Right to Know Components

Strontium peroxide	CAS-No. 1314-18-7	Revision Date 1993-04-24
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### New Jersey Right to Know Components

Strontium peroxide	CAS-No. 1314-18-7	Revision Date 1993-04-24
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### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.

H272	May intensify fire; oxidizer.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

### HMIS Rating

Health hazard:	2
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### Chronic Health Hazard:

Flammability:	0
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Physical Hazard	2
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### NFPA Rating

Health hazard:	2
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Fire Hazard:	0
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Reactivity Hazard:	2
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Special hazard.I:	OX
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### Further Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.