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Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THECOMPANY/UNDERTAKING

Product Identifier

Perihalan Produk: Strontium sulfide
Product Description: Strontium sulfide

 Cat No. :
 89895

 CAS No
 1314-96-1

 Molecular Formula
 SrS

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Company Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd

Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square, No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,

Selangor Darul Ehsan, Malaysia. Main line: +60 3-5525 7888

**Supplier** 

E-mail address Enquiry.my@thermofisher.com

Emergency Telephone Number Tel: +03-5525 7888

CHEMTREC Malaysia 1-800-815-308 (Malay)

CHEMTREC Malaysia (Kuala Lumpur) +(60)-327884561 (Malay)

# **SECTION 2: HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

| Substances/mixtures corrosive to metal | Category 1 (H290)   |
|--|---------------------|
| Acute oral toxicity                    | Category 3 (H301)   |
| Skin Corrosion/Irritation              | Category 1 A (H314) |
| Serious Eye Damage/Eye Irritation      | Category 1 (H318)   |
| Acute aquatic toxicity                 | Category 1 (H400)   |

## Label Elements



Signal Word Danger

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#### **Hazard Statements**

H290 - May be corrosive to metals

H301 - Toxic if swallowed

H314 - Causes severe skin burns and eye damage

H400 - Very toxic to aquatic life

# **Precautionary Statements**

#### Prevention

P234 - Keep only in original packaging

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P284 - Wear respiratory protection

#### Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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 or doctor

P330 - Rinse mouth

P331 - Do NOT induce vomiting

P390 - Absorb spillage to prevent material damage

P362 + P364 - Take off contaminated clothing and wash it before reuse

#### Storage

P402 - Store in a dry place

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P406 - Store in corrosion resistant polypropylene container with a resistant inliner

P405 - Store locked up

# Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

## Other Hazards

EUH031 - Contact with acids liberates toxic gas

EUH071 - Corrosive to the respiratory tract

This product does not contain any known or suspected endocrine disruptors

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

| Component         | CAS No    | Weight % |  |  |
|-------------------|-----------|----------|--|--|
| Strontium sulfide | 1314-96-1 | <=100    |  |  |

# **SECTION 4: FIRST AID MEASURES**

Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

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attention is required.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Self-Protection of the First Aider No special precautions required.

Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

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

**Notes to Physician** Treat symptomatically.

# **SECTION 5: FIREFIGHTING MEASURES**

## Extinguishing media

#### **Suitable Extinguishing Media**

Not combustible. CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam.

## Extinguishing media which must not be used for safety reasons

No information available.

## Special hazards arising from the substance or mixture

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

## **Hazardous Combustion Products**

Sulfur oxides, Metal oxides, Hydrogen sulfide (H2S),

#### Advice for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# Personal Precautions, Protective Equipment and Emergency Procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid dust formation.

#### **Environmental precautions**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

## Methods and Material for Containment and Cleaning Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

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#### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7: HANDLING AND STORAGE**

#### **Precautions for Safe Handling**

Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not ingest. If swallowed then seek immediate medical assistance. Do not breathe (dust, vapor, mist, gas). Avoid dust formation.

## Conditions for Safe Storage, Including any Incompatibilities

Store under an inert atmosphere. Protect from moisture. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

## Specific End Uses

Use in laboratories.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Parameters**

# **Exposure Controls**

## **Engineering Measures**

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

**Eye Protection** Goggles

Hand Protection Protective gloves
Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** No protective equipment is needed under normal use conditions

Recommended Filter type: Particle filter

<u>Hygiene Measures</u> Handle in accordance with good industrial hygiene and safety practice

**Environmental exposure controls** Prevent product from entering drains Do not allow material to contaminate ground water

system Local authorities should be advised if significant spillages cannot be contained

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# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Solid

Solid

Information on basic physical and chemical properties

AppearanceGreyPhysical StateSolid

Odor Rotten-egg like
Odor Threshold No data available
pH Not applicable

Melting Point/Range> 2000 °C / 3632 °FSoftening PointNo data availableBoiling Point/RangeNo information availableFlack PointNo information available

Flash Point No information available Method - No information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Explosion Limits No data available

Vapor Pressure No data available

Vapor DensityNot applicableSolidSpecific Gravity / Density3.7 g/cm3@ 20 °C

Bulk Density

Water Solubility

Solubility in other solvents

No data available
No information available
No information available

Partition Coefficient (n-octanol/water)

Autoignition TemperatureNo data availableDecomposition TemperatureNo data available

Viscosity Not applicable

Explosive Properties No information available No information available

Molecular FormulaSrSMolecular Weight119.68

# **SECTION 10: STABILITY AND REACTIVITY**

Reactivity

Yes.

**Chemical Stability** 

Hygroscopic.

Possibility of Hazardous Reactions

**Hazardous Polymerization** No information available.

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**Hazardous Reactions** None under normal processing.

**Conditions to Avoid** 

Exposure to moist air or water.

Incompatible Materials

Oxidizing agent.

**Hazardous Decomposition Products** 

Sulfur oxides. Metal oxides. Hydrogen sulfide (H2S).

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# Information on Toxicological Effects

**Product Information** 

(a) acute toxicity;

OralCategory 3DermalNo data availableInhalationNo data available

(b) skin corrosion/irritation; Category 1 A

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs None known.

(j) aspiration hazard; Not applicable

Solid

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delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Endocrine Disrupting Properties** 

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## **SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity effects** Very toxic to aquatic organisms. The product contains following substances which are

hazardous for the environment. May cause long-term adverse effects in the environment.

Do not allow material to contaminate ground water system.

Persistence and degradability Product contains heavy metals. Discharge into the environment must be avoided. Special

pre-treatment is necessary

**Persistence** 

Degradability

May persist. Not relevant for inorganic substances.

Degradation in sewage

treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulative potential Product has a high potential to bioconcentrate

No information available. Mobility in soil

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors

Other adverse effects No information available

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste treatment methods

Waste from Residues/Unused

**Products** 

Should not be released into the environment Waste is classified as hazardous Dispose of in

accordance with the European Directives on waste and hazardous waste Dispose of in accordance with local regulations

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Do not flush to sewer Waste codes should be assigned by the user based on the

application for which the product was used Do not empty into drains Large amounts will affect pH and harm aquatic organisms Do not let this chemical enter the environment

# **SECTION 14: TRANSPORT INFORMATION**

IMDG/IMO

UN3262 **UN-No Hazard Class** 8 Packing Group

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. Strontium sulfide **Proper Shipping Name** 

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**Road and Rail Transport** 

UN3262 **UN-No Hazard Class** 8 **Packing Group** 

**Proper Shipping Name** CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. Strontium sulfide

IATA

UN3262 **UN-No Hazard Class Packing Group** Ш

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. Strontium sulfide **Proper Shipping Name** 

**Special Precautions for User** No special precautions required

## **SECTION 15: REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

China X = listed U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) International Inventories

Australia (AICS) Korea (KECL) China (IECSC) Japan (ENCS) Philippines (PICCS)

| Component         | EINECS    | TSCA | DSL | PICCS | ENCS | ISHL | IECSC | AICS | KECL     |
|-------------------|-----------|------|-----|-------|------|------|-------|------|----------|
| Strontium sulfide | 215-249-2 | X    | -   | -     | X    | X    | Χ     | -    | KE-32250 |

**National Regulations** 

**Persistent Organic Pollutant Ozone Depletion Potential** 

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

# **SECTION 16: OTHER INFORMATION**

## Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Substances List

**ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

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ATE - Acute Toxicity Estimate

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**BCF** - Bioconcentration factor

**VOC** - (Volatile Organic Compound)

## Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Prepared By Health, Safety and Environmental Department

Revision Date 28-Mar-2025 Revision Summary Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

## **Disclaimer**

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**End of Safety Data Sheet** 

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