SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-O-14589
Product Name	Selenium sulfide
CAS No.	7488-56-4
Category	Fine Chemicals
Synonyms	-
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H300	Not available
H301+H331	Not available
H301	Not available
H330	Not available

H331	Not available
H373	Not available
H400	Not available
H410	Not available

Precautionary Statement(s)

Code	Statement
P260	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Not available
P271	Use only outdoors or in a well-ventilated area.
P273	Not available
P284	Not available
P301+P316	Not available
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P316	Not available
P319	Get medical help if you feel unwell.
P320	Not available
P321	Specific treatment (see … on this label).
P330	Not available
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Selenium sulfide
CAS Number : 7488-56-4
Molecular Formula : SeS■
Molecular Weight : 143.09

Parent Chemical : Not available
Synonyms : -
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice:
- Seek medical attention if symptoms occur or persist.
- Show this Safety Data Sheet to the physician in attendance.

Inhalation:
- Move person to fresh air.
- If breathing is difficult, seek medical attention.

Skin contact:
- Remove contaminated clothing and shoes.
- Wash skin with soap and water.
- Seek medical attention if irritation develops.

Eye contact:
- Rinse cautiously with water for several minutes.
- Remove contact lenses if present and easy to do; continue rinsing.
- Seek medical attention if irritation persists.

Ingestion:
- Rinse mouth with water.
- Do not induce vomiting unless directed by medical personnel.
- Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.
- Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media:
- Use extinguishing measures appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:
- Not available.

5.2 Special hazards arising from the substance or mixture
- Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Avoid inhalation of combustion products.
- Cool containers exposed to fire with water spray if safe to do so.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Avoid breathing dust.
- Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).
- Ensure adequate ventilation.

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment.

6.3 Methods and material for containment and cleaning up
- Avoid generating dust.
- Collect spillage using methods that minimize dust generation (e.g., dampen if compatible).
- Place in a suitable, closed container for disposal.
- Clean contaminated area after material pickup.

6.4 Reference to other sections
- See Section 8 for personal protective equipment.
- See Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid formation of dust.
- Avoid breathing dust and contact with skin and eyes.
- Use with adequate ventilation.
- Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a tightly closed container.
- Store in a cool, dry, well-ventilated place.
- Protect from moisture.
- Incompatibilities: Not available.

7.3 Specific end use(s)
- Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits:
- Not available.

Biological limit values:
- Not available.

8.2 Exposure controls
Engineering controls:
- Provide appropriate exhaust ventilation and/or general ventilation to control airborne levels.

Personal protective equipment (PPE):
Eye/face protection:
- Safety glasses with side shields or chemical safety goggles.

Skin protection:
- Protective gloves.
- Protective clothing as appropriate to prevent skin contact.

Respiratory protection:
- If dust is generated and ventilation is inadequate, use an appropriate particulate respirator.

Hygiene measures:
- Do not eat, drink, or smoke when using this product.
- Wash hands and exposed skin after handling.

Environmental exposure controls:
- Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	Bright orange or reddish powder
IR spectrum	No data available
pH	No data available
Solubility	Complies

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available

Property	Value
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- Not available.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- Not available.

10.4 Conditions to avoid
- Avoid dust formation.
- Avoid exposure to moisture (if applicable).
- Not available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: Selenium readily substitutes for sulfur in biomolecules and in many biochemical reactions, especially when the concentration of selenium is high and the concentration of sulfur is low. Inactivation of the sulfhydryl enzymes necessary for oxidative reactions in cellular respiration, through effects on mitochondrial and microsomal electron transport, might contribute to acute selenium toxicity. Selenomethionine (a common organic selenium compound) also appears to randomly substitute for methionine in protein synthesis. This substitution may affect the structure and functionality of the protein, for example, by altering disulfide bridges. Inorganic forms of selenium appear to react with tissue thiols by redox catalysis, resulting in formation of reactive oxygen species and causing damage by oxidative stress. (L619) LD50: 138 mg/kg (Oral, Rat) (T14)
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: No data available.
- Carcinogenicity: /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ There is no evidence of carcinogenicity following topical application of a 2.5% /selenium disulfide/ lotion in mice. /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ ... Under the conditions of this bioassay, dermal application of Selsun was not carcinogenic for ICR Swiss mice. The study was limited, however, by the relatively short lifespan of this strain of mouse. ... Levels of Evidence of Carcinogenicity: Male Mice: Negative; Female Mice: Negative. /Selsun/
- Reproductive toxicity: Chronic oral exposure to high concentrations of selenium compounds can produce a disease called selenosis. The major signs of selenosis are hair loss, nail brittleness, and neurological abnormalities (such as numbness and other odd sensations in the extremities). Animal studies have shown that selenium may also affect sperm production and the female reproductive cycle. (L619)
- STOT-single exposure: No data available.
- STOT-repeated exposure: Chronic oral exposure to high concentrations of selenium compounds can produce a disease called selenosis. The major signs of selenosis are hair loss, nail brittleness, and neurological abnormalities (such as numbness and other odd sensations in the extremities). Animal studies have shown that selenium may also affect sperm production and the female reproductive cycle. (L619) /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ There is no evidence of carcinogenicity following topical application of a 2.5% /selenium disulfide/ lotion in mice.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- Selenium readily substitutes for sulfur in biomolecules and in many biochemical reactions, especially when the concentration of selenium is high and the concentration of sulfur is low. Inactivation of the sulfhydryl enzymes necessary for oxidative reactions in cellular respiration, through effects on mitochondrial and microsomal electron transport, might contribute to acute selenium toxicity. Selenomethionine (a common organic selenium compound) also appears to randomly substitute for methionine in protein synthesis. This substitution may affect the structure and functionality of the protein, for example, by altering disulfide bridges. Inorganic forms of selenium appear to react with tissue thiols by redox catalysis, resulting in formation of reactive oxygen species and causing damage by oxidative stress. (L619)

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- No data available.

12.2 Persistence and degradability
- No data available.

12.3 Bioaccumulative potential
- No data available.

12.4 Mobility in soil
- No data available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- Not available.

12.7 Other adverse effects
- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product:
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.

Contaminated packaging:
- Dispose of as unused product in accordance with applicable regulations.

Waste code:
- Not available.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
- Not available.

14.2 UN proper shipping name
- Not available.

14.3 Transport hazard class(es)
- Not available.

14.4 Packing group
- Not available.

14.5 Environmental hazards
- Not available.

14.6 Special precautions for user
- Not available.

14.7 Maritime transport in bulk according to IMO instruments
- Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

15.2 Chemical safety assessment
- Not available.

SECTION 16: Other information

SECTION 16: Other information

Product identifier:
- Product name: Selenium sulfide
- CAS No.: 7488-56-4
- Catalog No.: CS-O-14589
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Revision information:
- Not available.

Abbreviations and acronyms:
- SDS: Safety Data Sheet
- SCBA: Self-contained breathing apparatus

Disclaimer:
- The information provided is based on data available at the time of preparation and is believed to be accurate; however, no warranty is expressed or implied. Users are responsible for determining suitability for their particular application and for complying with applicable laws and regulations.

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