

CHAITANYA CHS, 2nd FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

MATERIAL SAFETY DATA SHEET (MSDS)

SELENIUM DIOXIDE

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : SELENIUM DIOXIDE

Product code : S0178600500

Identification of the product : Selenium
 CAS No: 7446-08-4
 EC No :231-957-4
 Annex No :034-001-00-2

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

Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification : SUVCHEM
 Chaitanya Tower, 2nd Floor, Office # 206,
 Siddharth Nagar, S.V. Road,
 Goregaon (West), Mumbai - 400062,
 Maharashtra, India.
 Contact: +91 22 28725393 / 94 / 95
 Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [Office hours]

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification : T; R23/25
 R33
 R53

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Acute toxicity, Inhalation - Category 3 - Danger (CLP : Acute Tox. 3) H331
 Acute toxicity, Oral - Category 3 - Danger (CLP : Acute Tox. 3) H301

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 4 (CLP :
 Aquatic Chronic 4) H413

2.2. Label elements

MATERIAL SAFETY DATA SHEET (MSDS)
SELENIUM DIOXIDE
2. Hazards identification -DSD (continued)
Labelling EC 67/548 or EC 1999/45
Symbol(s)

Symbol(s)

: T : Toxic

R Phrase(s)

: R23/25 : Toxic by inhalation and if swallowed.

R33 : Danger of cumulative effects.

R53 : May cause long-term adverse effects in the aquatic environment.

S Phrase(s)

: S1/2 : Keep locked up and out of reach of children.

S20/21 : When using, do not eat, drink or smoke.

S28 : After contact with skin, wash immediately with

S45 : In case of accident or if you feel unwell, seek medical advice immediately (
 show the label when possible).

S61 : Avoid release to the environment. Refer to special instructions/Safety data
 sheets.

Contains

: Selenium

Labelling Regulation EC 1272/2008 (CLP)
Hazard pictograms

Signal words

: Danger

Hazard statements

: H301 : Toxic if swallowed.

H331 : Toxic if inhaled.

H413 : May cause long lasting harmful effects to aquatic life.

Precautionary statements
• General

: P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

• Prevention

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

P261: Avoid breathing dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

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

• Response

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P304+P340: IF INHALED : Remove to fresh air and keep at rest in a position
 comfortable for breathing.

• Storage

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

P405: Store locked up.

• Disposal considerations

: P501: Dispose of this material and its container to hazardous or special waste
 collection point, in accordance with local, regional, national and/or international
 regulation.

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MATERIAL SAFETY DATA SHEET (MSDS)

SELENIUM DIOXIDE

2. Hazards identification -DSD (continued)

Contains : Selenium

2.3. Other hazards

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : Selenium

EC No :231-957-4
 Annex No :034-001-00-2
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Selenium	: 100 %	7782-49-2	231-957-4	034-001-00-2	----	T; R23/25 R33 R53 ----- Acute Tox. 3 (inhal) _ H331 Acute Tox. 3 (oral) _ H301 Aquatic Chronic 4 _ H413

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation : Assure fresh air breathing. Allow the victim to rest. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label). Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

Ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor. Specific treatment (see on this label).

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

Symptoms relating to use : Danger of serious damage to health by prolonged exposure through inhalation. Swallowing a small quantity of this material will result in serious health hazard.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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SELENIUM DIOXIDE
5. Fire-fighting measures
5.1. Extinguishing media

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media** : Do not use a heavy water stream.
- Surrounding fires** : Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

- Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.
- Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures

- For emergency responders** : Equip cleanup crew with proper protection.
Ventilate area.
- For non-emergency personnel** : Evacuate unnecessary personnel.

6.2. Environmental precautions

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage
7.1. Precautions for safe handling

MATERIAL SAFETY DATA SHEET (MSDS)
SELENIUM DIOXIDE
7. Handling and storage (continued)

- Handling** : Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapours, spray. Use only outdoors or in a well-ventilated area.
- Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

- Storage** : Keep only in the original container in a cool, well ventilated place. Keep container tightly closed.
- Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

- Specific end use(s)** : None.

8. Exposure controls/personal protection
8.1. Exposure controls

- Personal protection** : Avoid all unnecessary exposure.
- **Respiratory protection** : In case of insufficient ventilation, wear suitable respiratory equipment.
 - **Hand protection** : Wear protective gloves.
 - **Eye protection** : Chemical goggles or safety glasses.
 - **Others** : When using, do not eat, drink or smoke.

8.2. Control parameters

- Occupational Exposure Limits** : No data available.

9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

- Physical state at 20 °C** : Solid.
- Colour** : Black
- Odour** : Odorless
- Odour threshold** : No data available.
- pH value** : No data available.
- Melting point [°C]** : 217 °C
- Decomposition point [°C]** : N/A
- Critical temperature [°C]** : N/A

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SELENIUM DIOXIDE

9. Physical and chemical properties (continued)

Auto-ignition temperature [°C]	: N/A
Flammability (solid, gas)	: N/A
Flash point [°C]	: N/A
Boiling point [°C]	: 685 °C
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: N/A
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm ³]	: 4,81
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Insoluble in water
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm ² /s]	: N/A

9.2. Other information

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

10. Stability and reactivity

10.1. Reactivity.

Reactivity	: Not established.
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10.2. Chemical stability.

Chemical stability	: Stable under recommended storage conditions.
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10.3. Possibility of hazardous reactions

Hazardous reactions	: Not established.
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10.4. Conditions to avoid

MATERIAL SAFETY DATA SHEET (MSDS)

SELENIUM DIOXIDE

10. Stability and reactivity (continued)

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

- Inhalation : Toxic if inhaled.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : Toxic if swallowed.

Corrosion : Based on available data, the classification criteria are not met.

Irritation : Based on available data, the classification criteria are not met.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

12. Ecological information

12.1. Toxicity

Toxicity information : May cause long lasting harmful effects to aquatic life.

12.2. Persistence - degradability

Persistence - degradability : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

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SELENIUM DIOXIDE
12. Ecological information (continued)
12.4. Mobility in soil

Mobility in soil : Not established.

12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions : Avoid release to the environment.

13. Disposal considerations
13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Special precautions : Hazardous waste due to toxicity.

14. Transport information
14.1. Land transport (ADR-RID)

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
UN N° : 3077
H.I. nr : 90
ADR - Class : 9
Labelling - Transport : 9 : Miscellaneous dangerous substances and articles.



ADR - Classification code : M7
ADR - Group : III
ADR - Packing instructions : P002 R001 LP002
ADR - Limited Quantity : 5 KG

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14. Transport information (continued)

ADR - Tunnel code : E : Passage forbidden through tunnels of category E.



14.2. Sea transport (IMDG). [English only]

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 UN N° : 3077
 IMO-IMDG - Class or division : 9 : Miscellaneous dangerous substances and articles.
 IMO-IMDG - Packing group : III
 IMO-IMDG - Packing instructions : P002 LP02
 IMO-IMDG - Limited quantities : 5 kg
 IMO-IMDG - Marine pollution : No
 EMS-Nr : F-A S-F

14.3. Air transport (ICAO-IATA). [English only]

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 UN N° : 3077
 IATA - Class or division : 9 : Miscellaneous dangerous substances and articles.
 IATA - Packing group : III
 IATA - Passenger and Cargo Aircraft : ALLOWED
 - Passenger and Cargo - Packing instruction : 956
 - Passenger and Cargo - Maximum Quantity/Packing : 400 kg
 IATA - Cargo only : ALLOWED
 - Cargo only - Packing instruction : 956
 - Cargo only - Maximum Quantity/Packing : 400 kg
 IATA - Limited Quantities : 30 kg G
 ERG-Nr : 9L

15. Regulatory information

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

Safety, health and environmental regulations/legislation specific for the substance or mixture : Ensure all national/local regulations are observed.

MATERIAL SAFETY DATA SHEET (MSDS)

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

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- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

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