

Safety Data Sheet

#28761535 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
Sodium selenite anhydrous	10102-18-8	Na ₂ SeO ₃	10	15 Oct 2026

SECTION 1

Identification

1.1 Product identifier

Product name Sodium selenite anhydrous

CAS number 10102-18-8

EC / EINECS number 233-267-9

Chemical formula Na₂SeO₃

Molecular weight 172.94

SMILES [Na].O=[Se](O)O

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

Research and development, laboratory chemicals, manufacture of substances; not suitable for human consumption or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Acute Tox. 2 (oral), H300

Acute Tox. 2 (inhalation), H330

Skin Irrit. 2, H315

Skin Sens. 1, H317

Eye Irrit. 2, H319

Aquatic Acute 1, H400

Aquatic Chronic 1, H410

2.2 Label elements



DANGER

CODE	HAZARD STATEMENT
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EUH031	Contact with acids liberates toxic gas
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H300	Fatal if swallowed
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H317	May cause an allergic skin reaction
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H319	Causes serious eye irritation
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H330	Fatal if inhaled
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H410	Very toxic to aquatic life with long lasting effects
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CODE	PRECAUTIONARY STATEMENT
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P260	Do not breathe dust/fume/gas/mist/vapours/spray
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P273	Avoid release to the environment
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
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P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
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2.3 Other hazards

No data available.

SECTION 3

Composition / information on ingredients**3.1 Substances**

Name	Sodium selenite anhydrous
CAS number	10102-18-8
EC number	233-267-9
Concentration / purity	<i>Not applicable</i>
Classification according to Regulation (EC) No 1272/2008	Acute Tox. 2 (oral), H300 Acute Tox. 2 (inhalation), H330 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Hazard statements	EUH031, H300, H317, H319, H330, H410
Acute toxicity estimate (ATE)	<i>No data available</i>
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures**4.1 Description of first aid measures**

Inhalation	Remove person to fresh air and keep comfortable for breathing; immediately call a poison center/doctor; give artificial respiration if breathing stops and oxygen if breathing is difficult.
Skin contact	Take off immediately all contaminated clothing, rinse skin with water or shower, immediately call a poison center/doctor and transfer to hospital.
Eye contact	Remove contact lenses if present and rinse eyes with water for at least 15 minutes; seek medical attention.
Ingestion	Give water to drink (two glasses at most), seek medical advice immediately, administer activated charcoal; induce vomiting only in exceptional cases if medical care is unavailable within one hour and the person is fully conscious; do not attempt to neutralise.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

Not applicable

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically; no special treatment requirement.

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Toxic; thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3 Advice for firefighters

Evacuate area, avoid breathing gas/fume/vapours, cool containers exposed to heat with water spray and remove them if no risk is involved.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/vapours, provide adequate ventilation, avoid contact with skin and eyes and avoid dust formation; see section 8 for PPE.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse if possible; dispose of large amounts according to local authority agreement.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Wear protective clothing, gloves, eye and face protection; avoid contact with skin and eyes and do not breathe dust; do not eat, drink or smoke when using; keep containers tightly closed.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature Ambient

Conditions for safe storage (incompatibilities) Store at room temperature in a dry place in a closed container under inert gas (moisture sensitive); toxic storage; store away from acids.

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection**8.1 Control parameters**

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Wear protective nitrile gloves (thickness 0.11 mm, breakthrough time 8 hours); inspect gloves before use and wash skin thoroughly after handling.
Respiratory protection	Self-contained breathing apparatus Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.
Other protection	Good personal hygiene practices advised; wash contaminated skin thoroughly after handling.
Environmental exposure controls	Avoid discharge into drains.

SECTION 9

Physical & chemical properties**9.1 Information on basic physical and chemical properties**

Appearance / physical state	Solid DERIVED FROM: LITERATURE
Colour	Beige DERIVED FROM: LITERATURE
Odour	<i>Not applicable</i>
Melting / freezing point	<i>Not applicable</i>
Boiling point	<i>Not applicable</i>
Flammability	<i>No data available</i>
Lower and upper explosion limit	<i>No data available</i>
Flash point	<i>Not applicable</i>
Auto-ignition temperature	<i>Not applicable</i>
Decomposition temperature	<i>No data available</i>
pH	<i>Not applicable</i>
Acidity	Base DERIVED FROM: LITERATURE

Kinematic viscosity	<i>No data available</i>
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Solubility	Soluble in water. DERIVED FROM: LITERATURE
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Partition coefficient n-octanol/water (log value)	<i>Not applicable</i>
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Vapour pressure	<i>Not applicable</i>
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Density (g/mL)	3.1 g/mL DERIVED FROM: LITERATURE
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Relative vapour density	<i>No data available</i>
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Particle characteristics	<i>No data available</i>
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9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

Contact with acids liberates toxic gas.

10.2 Chemical stability

Stable under normal temperature conditions and under the prescribed storage conditions.

10.3 Possibility of hazardous reactions

Risk of explosion and/or toxic gas formation with acids; generates dangerous gases or fumes in contact with acids.

10.4 Conditions to avoid

Not applicable

10.5 Incompatible materials

Acids, strong oxidising agents.

10.6 Hazardous decomposition products

See section 5.

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	Oral LD50 (rat): 7 mg/kg (somnolence, diarrhoea); Inhalation LC50 (rat, 4 h): 0.51 mg/l (dust/mist).
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Skin corrosion / irritation	<i>Not applicable</i>
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Eye corrosion / irritation	Causes serious eye irritation
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Respiratory / skin sensitisation	May cause an allergic skin reaction
Carcinogenicity	<i>Not applicable</i>
Mutagenicity	<i>Not applicable</i>
Reproductive toxicity	<i>Not applicable</i>
STOT (single / repeated exposure)	<i>Not applicable</i>
Aspiration hazard	<i>Not applicable</i>

11.2 Information on other hazards

Not applicable

SECTION 12

Ecological information

12.1 Toxicity

Fish LC50 (Pimephales promelas, 96 h): 1.7 mg/l; Daphnia magna EC50 (48 h): 1.1 mg/l; Chronic NOEC (Oncorhynchus mykiss, 30 days): 0.16 mg/l.

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14

Transport information

14.1 UN number or ID number

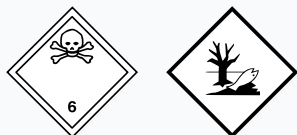
UN2630

14.2 UN proper shipping name

SELENITES

14.3 Transport hazard class(es)

6.1



14.4 Packing group

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14.5 Environmental hazards

Environmentally hazardous; IMDG marine pollutant: Yes.

14.6 Special precautions for user

Special precautions for user Tunnel restriction code C/E; transport category 1; IMDG EmS F-A, S-A.

Transport category 1

Tunnel code (C/E)

Packing instruction (ADR) P002

Packing instruction (IMDG) P002

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences) Complies with Regulation (EC) No 1907/2006 and Regulation (EU) 2020/878; no national regulation data available.

REACH code Y110

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Version 1.0, issued 2024-02-02; classifications: Acute Tox. 2 (oral, inhalation), Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1/2; H300+H330, H315, H317, H319, H400, H410, EUH031.

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.