

Material Safety Data sheet

Section 1: Product and Company Information

Product Name	Selenite Cystine Broth		
Catalogue Number	i23646	Technical Phone	0098 21 66787291
E-mail	ibresco@gmail.com	Fax No	09391003565
Company Address	Zist Kavosh Iranian, No.432, East Kokab Av,45 Metri Golshahr, Karaj, Iran.		

Section 2: Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Acute toxicity, Oral (Category 2), H300
 Acute toxicity, Inhalation (Category 4), H332
 Specific target organ toxicity - repeated exposure (Category 2), H373
 Short-term (acute) aquatic hazard (Category 2), H401
 Long-term (chronic) aquatic hazard (Category 2), H411

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H300 Fatal if swallowed.
 H332 Harmful if inhaled.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.
 P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
 P264 Wash 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.
 P273 Avoid release to the environment.

Precautionary statement(s)

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
 P314 Get medical advice/ attention if you feel unwell.
 P391 Collect spillage.
 P405 Store locked up.
 P501 Dispose of contents/ container to an approved waste disposal plant.

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

none

Section 3: Composition / Information on Ingredients

Mixture

Component	Classification	Concentration*
sodium hydrogenselenite		
CAS-No.	7782-82-3	Acute Tox. 1; Acute Tox. 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H331, H373, H400, H410
EC-No.	231-966-3	
Index-No.	034-002-00-8	

* Weight %

Section 4: First Aid Measures

Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call-in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately.

In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Carbon oxides

Oxides of phosphorus

Sodium oxides

Selenium/selenium oxides

Mixture with combustible ingredients.

Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Advice on safe handling Work under hood. Do not inhale substance/mixture.

Hygiene measures Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Hygroscopic. Store under inert gas. Moisture sensitive.

Storage class Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials.

Section 8: Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
sodium hydrogen selenite	7782-82-3	TWA	0.2 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required			
		TWAEV	0.2 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	0.1 mg/m3	Canada. British Columbia OEL
		TWA	0.2 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Exposure controls

Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

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

Skin protection

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Physical state	powder
Color	beige
Odor	No data available
Odor Threshold	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Vapor pressure	No data available
Vapor density	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	6.8 - 7.2 at 37 °C (99 °F)
Viscosity	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Density	No data available
Relative density	No data available

Explosive properties	Not classified as explosive.
Oxidizing properties	none
Other safety information	No data available

Section 10: Stability and Reactivity

Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

No data available

Conditions to avoid

No data available

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Mixture

	Acute toxicity estimates Oral - 14.27 mg/kg (Calculation method)
Acute toxicity	Acute toxicity estimates Inhalation - 4 h - 3.43 mg/l (Calculation method) Acute toxicity estimates Dermal - > 5,000 mg/kg (Calculation method)
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	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	Mixture may cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	No data available

Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties cannot be excluded. This substance should be handled with particular care. Handle in accordance with good industrial hygiene and safety practice.

Components

sodium hydrogen selenite

Acute toxicity	LD50 Oral - Rat - 2.5 mg/kg Remarks: (RTECS) (Regulation (EC) No 1272/2008, Annex VI) Acute toxicity estimate Inhalation - 0.6 mg/l (Expert judgment) Dermal: No data available
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	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	No data available

Section 12: Ecological Information

Toxicity	
Mixture	No data available
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted.
Other adverse effects	No data available
Components	
sodium hydrogen selenite	No data available

Section 13: Disposal Consideration

Waste treatment methods	
Product	Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material
Contaminated packaging	Dispose of as unused product.

Section 14: Transport Information

TDG	UN number: 3283 Class: 6.1 Packing group: II Proper shipping name: SELENIUM COMPOUND, SOLID, N.O.S. (sodium hydrogen selenite) Labels: 6.1 ERG Code: 151 Marine pollutant: no
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IMDG	UN number: 3283 Class: 6.1 Packing group: II EMS-No: F-A, S-A Proper shipping name: SELENIUM COMPOUND, SOLID, N.O.S. (sodium hydrogen selenite)
IATA	UN number: 3283 Class: 6.1 Packing group: II Proper shipping name: Selenium compound, solid, n.o.s. (sodium hydrogen selenite)

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Section 16: Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

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. *ibresco* shall not be held liable for any damage resulting from handling or from contact with the above product.

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