

## SAFETY DATA SHEET

Creation Date 16-Nov-2010

Revision Date 19-Jan-2018

Revision Number 3

### 1. Identification

**Product Name** Sodium selenite

**Cat No. :** AC200730000; AC200730250; AC200731000; AC200735000

**CAS-No** 10102-18-8  
**Synonyms** Disodium Selenite; Selenious Acid

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

#### Details of the supplier of the safety data sheet

##### Company

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

##### **Emergency Telephone Number**

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 2
Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Sensitization	Category 1

#### Label Elements

##### **Signal Word**

Danger

##### **Hazard Statements**

Fatal if swallowed  
Toxic if inhaled  
May cause an allergic skin reaction



**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves  
 Wear eye/face protection

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Remove/Take off immediately all contaminated clothing  
 Wash contaminated clothing before reuse

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth

**Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Toxic to aquatic life with long lasting effects  
 Contact with acids liberates toxic gas

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sodium selenite	10102-18-8	>95

### 4. First-aid measures

<b>Eye Contact</b>	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
<b>Inhalation</b>	Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is required. 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.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician immediately.
<b>Most important symptoms and effects</b>	May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available  
**Method -** No information available

#### Autoignition Temperature

#### Explosion Limits

**Upper** No data available  
**Lower** No data available  
**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available

#### Specific Hazards Arising from the Chemical

Non-combustible.

#### Hazardous Combustion Products

None known

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### NFPA

<b>Health</b> 4	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical hazards</b> N/A
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### 6. Accidental release measures

**Personal Precautions** Avoid contact with the skin and the eyes. Use personal protective equipment. Ensure adequate ventilation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system.

**Methods for Containment and Clean Up** Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

### 7. Handling and storage

**Handling** Do not breathe dust. Do not get in eyes, on skin, or on clothing. Use only in area provided with appropriate exhaust ventilation.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep locked-up.

### 8. Exposure controls / personal protection

#### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sodium selenite	TWA: 0.2 mg/m <sup>3</sup>	(Vacated) TWA: 0.2 mg/m <sup>3</sup>	IDLH: 1 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

#### Personal Protective Equipment

<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

<b>Physical State</b>	Powder Solid
<b>Appearance</b>	Beige
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	9 50 g/l aq.sol
<b>Melting Point/Range</b>	350 °C / 662 °F
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid,gas)</b>	No information available
<b>Flammability or explosive limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	3.1 (H2O=1)
<b>Solubility</b>	950 g/L @ 20 °C
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	
<b>Decomposition Temperature</b>	>300 °C
<b>Viscosity</b>	Not applicable
<b>Molecular Formula</b>	Na2 O3 Se
<b>Molecular Weight</b>	172.94

## 10. Stability and reactivity

<b>Reactive Hazard</b>	Yes
<b>Stability</b>	Stable under normal conditions. Moisture sensitive.
<b>Conditions to Avoid</b>	Temperatures above 300°C. Incompatible products. Exposure to moist air or water.
<b>Incompatible Materials</b>	Acids, Strong acids
<b>Hazardous Decomposition Products</b>	None under normal use conditions
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous Reactions</b>	None under normal processing.

## 11. Toxicological information

### Acute Toxicity

**Product Information**  
**Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium selenite	LD50 = 7 mg/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium selenite	10102-18-8	Not listed				

**Mutagenic Effects** Ames test: positive.

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** See actual entry in RTECS for complete information.

## 12. Ecological information

### Ecotoxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No	UN2630
Proper Shipping Name	SELENATES
Proper technical name	Sodium selenite
Hazard Class	6.1
Packing Group	I

### TDG

UN-No	UN2630
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<b>Proper Shipping Name</b>	SELENATES
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	I
<b>IATA</b>	
<b>UN-No</b>	UN2630
<b>Proper Shipping Name</b>	SELENITES
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	I
<b>IMDG/IMO</b>	
<b>UN-No</b>	UN2630
<b>Proper Shipping Name</b>	SELENATES
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	I

## 15. Regulatory information

### International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Sodium selenite	X	X	-	233-267-9	-		X	X	X	X	X

#### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Sodium selenite	10102-18-8	>95	1.0

**SARA 311/312 Hazard Categories** See section 2 for more information

### CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Sodium selenite	X	100 lb	X	-

**Clean Air Act** Not applicable

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Sodium selenite	X		-

**OSHA Occupational Safety and Health Administration**  
Not applicable

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium selenite	100 lb	100 lb

**California Proposition 65** This product does not contain any Proposition 65 chemicals

#### U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Sodium selenite	X	X	X	X	X

#### U.S. Department of Transportation

Reportable Quantity (RQ): Y  
 DOT Marine Pollutant N  
 DOT Severe Marine Pollutant N

#### U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

#### Other International Regulations

**Mexico - Grade** No information available

## 16. Other information

**Prepared By** Regulatory Affairs  
 Thermo Fisher Scientific  
 Email: EMSDS.RA@thermofisher.com

**Creation Date** 16-Nov-2010  
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**Print Date** 19-Jan-2018  
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**