



Material Safety Data Sheet

Section 1: Product and Company Identification			
Product Name	Sodium Selenite		
Catalogue Number:	ASC-1015	CAS Number:	10102-18-8
E-mail:	Sales@ausamics.com	Website:	Ausamics.com
Section 2: Hazards 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 2		
Skin Corrosion/Irritation	Category 2		
Serious Eye Damage/Eye Irritation	Category 2		
Skin Sensitization	Category 1		
Label Elements			
Signal Word	Danger 		
Hazard Statements	Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction Fatal if swallowed or if inhaled		
Precautionary Statements Prevention	Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wear respiratory protection Wear protective gloves/protective clothing/eye protection/face protection Contaminated work clothing should not be allowed out of the workplace.		
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician.		
Skin	IF ON SKIN: Wash with plenty of soap and water Take off contaminated clothing and wash before reuse If skin irritation or rash occurs: Get medical advice/attention		



Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
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)	Very toxic to aquatic life with long lasting effects. Contact with acids liberates toxic gas

Section 3: Composition / Information on Ingredients

Component	CAS No	Weight %
Sodium selenite	10102-18-8	<100

Section 4: First Aid Measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. 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. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately.
Most important symptoms and effects	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
Notes to Physician	Treat symptomatically

Section 5: Firefighting 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



Autoignition Temperature	No information available		
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. Do not allow run-off from firefighting to enter drains or water courses.		
Hazardous Combustion Products	Selenium hydride		
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. Thermal decomposition can lead to release of irritating gases and vapors.		
NFPA			
Health	Flammability	Instability	Physical hazards
4	0	0	N/A

Section 6: Accidental Release Measures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
Environmental Precautions	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods for Containment and Clean Up	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Section 7: Handling and storage

Handling	Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed, then seek immediate medical assistance.
Storage	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep locked up. Keep away from water or moist air. Incompatible Materials. Acids. Strong acids.

Section 8: Exposure Controls / Personal Protection

Exposure Guidelines

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

**Legend**

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.
Personal Protective Equipment	
Eye/face Protection	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.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	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 respirators if exposure limits are exceeded or if irritation or other symptoms are experienced.
Recommended Filter type	Particulates filter conforming to EN 143.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

Section 9: Physical and Chemical Properties

Physical State	Powder Solid
Appearance	Beige
Odor	Odorless
Odor Threshold	No information available
pH	9 50 g/l aq.sol
Melting Point/Range	350 °C / 662 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid, gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable



Specific Gravity	3.1 (H ₂ O=1)
Solubility	950 g/L @ 20 °C
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	>300 °C
Viscosity	Not applicable
Molecular Formula	Na ₂ O ₃ Se
Molecular Weight	172.94

Section 10: stability and Reactivity	
Reactive Hazard	Yes
Stability	Stable under normal conditions. Moisture sensitive.
Conditions to Avoid	Temperatures above 300°C. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Acids, Strong acids
Hazardous Decomposition Products	Selenium hydride
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	Contact with acids liberates toxic gas.

Section 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	QSAR [Se2-], LC50 = 0.052 mg/m ³ air
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	Not listed	Not listed	Not listed	Not listed
Mutagenic Effects		No information available				
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		The toxicological properties have not been fully investigated.				

Section 12: Ecological Information

Ecotoxicity	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Based on available literature and data from closely analogous substances using structure/activity relationships.
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.

Section 13: Disposal Consideration

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.
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Section 14: Transport Information

DOT UN-No Proper Shipping Name Technical Name	UN2630 SELENATES Sodium selenite
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Hazard Class Packing Group	6.1 I
TDG UN-No Proper Shipping Name Hazard Class Packing Group	UN2630 SELENATES 6.1 I
IATA UN-No Proper Shipping Name Hazard Class Packing Group	UN2630 SELENATES 6.1 I
IMDG/IMO UN-No Proper Shipping Name Hazard Class Packing Group	UN2630 SELENATES 6.1 I

Section 15: Regulatory Information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Sodium selenite	10102-18-8	X	ACTIVE	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

Not applicable

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium selenite	10102-18-8	X	-	233-267-9	X	X	X	X	X	KE-31605

U.S. Federal Regulations

SARA 313

Component	CAS No	Weight %	SARA 313 - Threshold Values %
Sodium selenite	10102-18-8	<100	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						
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	Pennsylvanias	Illinois		
Sodium selenite	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				
Authorization /Restrictions according to EU REACH						
Component	CAS No	REACH (1907/2006) - Annex XIV -	REACH (1907/2006) - Annex XVII -	REACH Regulation (EC 1907/2006)		



		Substances Subject to Authorization	Restrictions on Certain Dangerous Substances	article 59 - Candidate List of Substances of Very High Concern (SVHC)
Sodium selenite	10102-18-8	-	Use restricted. See item 75. (see link for restriction details)	-

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sodium selenite	10102-18-8	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	Seveso III Directive (2012/18/EC) Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Sodium selenite	10102-18-8	Not applicable	Not applicable	Not applicable	Not applicable

Section 16: Additional Notes	
Documented By	Ausamics Life Science Sales@Ausamics.com
Revision date	June 03, 2023
Summary of Revisions	This document has been revised to meet the requirements of the US OSHA HazCom 2012 Standard, which supersedes the existing regulations outlined in 29 CFR 1910.1200, in order to align with the internationally recognized globally Harmonized System of Classification and Labeling of chemicals (GHS).
Disclaimer	The information presented in this Safety Data sheet is accurate to the best of our knowledge, information, and belief at the time of publication. It is intended as a guide for the safe handling, use, processing, storage, transportation, disposal, and release of specific materials. However, it should be interpreted as a warranty or quality specification. The provided information pertains solely to the designated material and may not be applicable to its use in combination with other materials or in any process, unless explicitly stated in the text.