



### SAFETY DATA SHEET

#### 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers	
i	Product Name : <b>Sodium Selenite</b>
ii	Chemical Formula : $\text{Na}_2\text{O}_3\text{Se}$
iii	CAS No. : 10102-18-8
iv	EC No. : 233-267-9
v	Hazardous : Yes
vi	Appearance : White to beige solid powder
vii	Content : Minimum 99%
1.2 Relevant identified uses of the substance	
i	Identified uses : Anti-inflammatory agent, cancer medicine synthesis
1.3 Details of Manufacturer	
i	Company : <b>Samrat Pharmachem Limited</b>
ii	Address : Plot No. A2/3445, GIDC, Phase 4, Ankleshwar – 393002, Gujarat, India.
iii	Phone : +91-7045456789 / 7046456789
iv	Email : <a href="mailto:contact@samratpharmachem.in">contact@samratpharmachem.in</a>
v	Webpage : <a href="http://www.samratpharmachem.com">www.samratpharmachem.com</a>
1.4 Emergency Number	
i	Emergency Phone : +91-7045456789 / 7046456789





#### 2. HAZARD IDENTIFICATION

2.1 Classification of substance			
i	H300	Acute toxicity, oral	: Fatal if swallowed (Category 2)
ii	H330	Acute toxicity, inhalation	: Fatal if inhaled. (Category 3)
iii	H315	Skin irritation	: Irritates the exposed skins(Category 2)
iv	H319	Eye irritation	: Causes serious eye irritation (Category 2)
v	H411	Chronic aquatic hazard	: Shows long term effect on aquatic living beings (Category 2)



### 2.2 GHS Label elements, including precautionary statements

i	Pictogram	:	 
ii	Signal word	:	Danger
iii	Hazard Statement(s)		
	H300 + H330	:	Fatal if swallowed or if inhaled.
	H315	:	Causes skin irritation.
	H317	:	May cause an allergic skin reaction.
iv	Precautionary Statement(s)		
	P273	:	Avoid release to the environment.
	P280	:	Wear protective gloves/ eye protection/ face protection
	P304 + P340 + P311	:	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
	P314	:	Get medical advice/ attention if you feel unwell.
	Supplemental Hazard statement	:	None



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

i	EUH031	:	Contact with acids liberates toxic gas.
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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances

i	Molecular Weight	:	172.94 g/mol
ii	Constituent Elements	:	Na <sub>2</sub> O <sub>3</sub> Se

## 4. FIRST AID MEASURES

### 4.1 Symptoms

i	<b>Most important symptoms and effects, both acute and delayed</b>
	High exposure can cause headache, nausea, vomiting, coated tongue, metallic taste, and a garlic odour of the breath. Sodium Selenite may damage the testes (male reproductive glands). Repeated exposures can cause pallor, dizziness, nervousness, and mood changes. Sodium Selenite may damage the liver and kidneys
ii	<b>Indication of any immediate medical attention &amp; special treatment needed</b>
	If seeking medical attention, provide SDS document to physician.





### 4.2 Description of first aid measures

i	Inhalation	: If inhaled, move victim to fresh air. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
ii	Ingestion	: Induce vomiting only if medical emergency is too far and the person is awake directed to do so by medical personnel. Rinse mouth out with water. If you feel still feel unwell, immediately make victim drink water (two glasses at least). Administer activated charcoal (20 - 40 g in a 10% slurry) Consult a doctor.
iii	Skin contact	: Take off immediately all contaminated clothing. Wash skin with plenty of water. Cover the irritated skin with an emollient. If skin irritation occurs: Get medical advice/attention.
iv	Eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

## 5. FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

i	Suitable extinguishing agents	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
	Unsuitable extinguishing agents	: For this substance/mixture no limitations of extinguishing agents are given.
ii	Special hazards arising from the substance or mixture	: Sodium oxides Selenium/selenium oxides Not combustible. Ambient fire may liberate hazardous vapours.
iii	Special remarks on Explosion Hazard	: No data available
iv	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.
v	Additional 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.





### 6. ACCIDENTAL RELEASE MEASURES

<b>6.1</b>	<b>Personal precautions, protective equipment &amp; emergency procedures</b>
	Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.
<b>6.2</b>	<b>Environmental precautions</b>
	Do not let product enter drains. Use non-sparking tools and equipment. Pick up spill for recovery or disposal and place in a closed container.
<b>6.3</b>	<b>Methods and material for containment and cleaning up</b>
	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions. Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.



### 7. HANDLING AND STORAGE

<b>7.1</b>	<b>Precautions for safe handling</b>
	Avoid raising dust. Use earthed equipment. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep container tightly closed.  <b>Hygiene measures:</b> Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
<b>7.2</b>	<b>Conditions for safe storage, including any incompatibilities</b>
	<b>Storage conditions:</b> Tightly closed. Do not store near combustible materials. Recommended storage temperature see product label. <b>Storage class:</b> Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous material.
<b>7.3</b>	<b>Specific end use(s)</b>
	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>8.1</b>	<b>Control Parameters</b>
i	<b>Ingredients with workplace control parameters</b>
	No data available
<b>8.2</b>	<b>Exposure Controls</b>
i	Appropriate engineering controls
	Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.





ii	Personal protective equipment
(a)	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.
(b)	Skin Protection
	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
(c)	Body Protection
	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
(d)	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. Recommended Filter type: Filter type P2 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
(e)	Control of environmental exposure
	Do not let product enter drains.

### 9. PHYSICAL & CHEMICAL PROPERTIES

<b>Appearance</b>	Form: Powder Colour: White to beige	<b>Explosiveness</b>	Non explosive
<b>Odour</b>	Odourless	<b>Vapour pressure</b>	No data available
<b>Odour threshold</b>	No data available	<b>Relative vapour density at 20°C</b>	No data available
<b>pH-value</b>	2-6	<b>Relative density</b>	No data available
<b>Melting/Freezing point</b>	>350°C	<b>Solubilities</b>	Water: 898 g/l at 25°C (soluble)
<b>Boiling point</b>	Decomposes	<b>Partition coefficient (n-octanol/water)</b>	No data available
<b>Flash Point</b>	Not determined	<b>Auto/Self-ignition temperature</b>	>400°C
<b>Evaporation rate</b>	No data available	<b>Decomposition temperature</b>	No data available
<b>Flammability</b>	Not flammable	<b>Viscosity</b>	No data available
<b>Density</b>	No data available	<b>Poison Class</b>	No data available





### 10. STABILITY & REACTIVITY

i	Reactivity	: contact with acid liberates toxic gases
ii	Chemical stability	: The product is chemically stable under normal conditions.
iii	Possible hazardous reactions	: There is a risk of explosion when the material comes in contact with acids.
iv	Conditions to avoid	: Incompatible products. Exposure to moist air or water
v	Incompatible material	: No data available
vi	Hazardous decomposition products	: Sodium oxides, Selenium oxides



### 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects			
i	Oral	LD50 Rat	7 mg/kg
ii	Inhalation	LD50 Rat	0.052-0.51 mg/L dust/mist
11.2 Corrosion Irritation			
i	Serious eye damage / irritation		No data available
ii	Respiratory or skin irritation		Damages human keratinocytes May cause skin allergic reaction
iii	Germ cell mutagenicity		No data available
iv	Carcinogenicity		There are no known carcinogenic chemicals in this product
v	Reproductive Toxicity		No data available
11.3 Additional information			
	May cause damage to organs from repeated exposure.		



### 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>			
i	Particulars	Type	Value
	Fish LC50	Pimephales promelas (fathead minnow)	1.7mg/L -96hrs
	Crustacea LC 50	Daphnia magna (Water flea)	1.1 mg/L – 48hrs
ii	Ecology – general	No data available	
iii	Ecology – air	No data available	
iv	Hazardous to aquatic environment – short term (acute)	Very toxic to aquatic organisms.	
v	Hazardous to aquatic environment – long term (chronic)	May cause long-term adverse effects in the aquatic environment. Based on available literature and data from closely analogous substances using structure/activity relationships.	





<b>12.2 Persistence and degradability</b>		
i	Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances
ii	Biodegradation	Not relevant for inorganics.
<b>12.3 Bio accumulative potential</b>		
i	BCF – Other aquatic organisms	1.850
ii	Partition coefficient n-octanol/water (Log Kow)	No data available
iii	Bioaccumulative potential	May bioaccumulate.
<b>12.4 Mobility in Soil</b>		
	Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility.	
<b>12.5 Results of PBT and vPvB assessment</b>		
	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	
<b>12.6 Other adverse effects</b>		
	Not known	

### 13. DISPOSAL CONSIDERATIONS

<b>13.1 Waste disposal recommendation's</b>	
i	General instructions
	Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.
ii	Product / Packaging disposal recommendations
	Avoid release to the environment




### 14. TRANSPORT INFORMATION

<b>14.1 In accordance with ADR / IMDG / IATA / ADN / RID</b>					
	<b>ADR</b>	<b>IMDG</b>	<b>IATA</b>	<b>ADN</b>	<b>RID</b>
i	UN Number				
	UN 2630	UN 2630	UN 2630	UN 2630	UN 2630
ii	UN proper shipping name				
	SELENITES (Sodium selenite)	SELENITES (Sodium selenite)	SELENITES (Sodium selenite)	SELENITES (Sodium selenite)	SELENITES (Sodium selenite)
iii	Transport hazard class				
	6.1	6.1	6.1	6.1	6.1



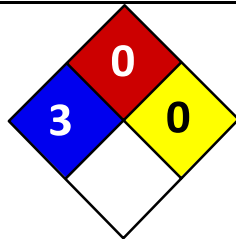


iv	Hazardous class symbols				
					
v	Packing group				
	I	I	I	I	I
vi	Environment hazards: Dangerous for the environment				
	Yes	Yes	No	Yes	Yes
vii	Marine Pollutant				
	NA	Yes	NA	NA	NA
<b>14.2 Transport in bulk according to annexure II of Marpol and the IBC Code</b>					
i	IBC Code		Not applicable		

### 15. REGULATORY INFORMATION

<b>15.1</b>	<b>Regulations</b>
i	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
ii	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
iii	<b>Toxic Substances Control Act (TSCA):</b> Sodium Selenite (CAS No. 10102-18-8): Listed for TSCA, Flag None. TSCA: Toxic Substances Control Act. Requirement to submit a pre-manufacturing notice before commencing to manufacture or import a new substance.

### 16. OTHER INFORMATION

<b>16.1</b>	<b>NFPA Rating</b>		
i	Health hazard	:	3 - Short exposure could cause serious temporary or moderate residual injury.
ii	Fire hazard	:	0 - Materials that will not burn under typical fire conditions.
iii	Reactivity	:	0 - Material that in themselves are normally stable, even under fire conditions.



<b>16.2 HMIS Rating</b>		<b>Health</b>
		<b>Fire</b>
		<b>Reactivity</b>
		<b>Personal Protection</b>
i	Health	: No data available
ii	Flammability	: No data available
iii	Physical	: No data available
iv	Personal Protection	: No data available
<b>16.3 Further Information</b>		
	The above information is derived from the available literature & believed to be correct but may not be complete & conclusive. The company shall not be responsible for any damage resulting from handling or usage of the product. The information shall be used only as a guide.	

**DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.