

## SODIUM SELENITE (ANH.)

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** SODIUM SELENITE (ANH.)  
**Product Code:** 683  
**CAS#:** 101002-18-8  
**Synonym:** Disodium selenite  
**Chemical Name:** Selenious acid, disodium salt.  
**Chemical Formula:** Na<sub>2</sub>SeO<sub>3</sub>.  
**Formula Weight:** 172.96

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Composition:**

**Name:** Sodium Selenite.

**Toxicological Data on Ingredients:**

H300 - Acute toxicity, Oral (Category 2)  
H317 Chronic aquatic toxicity (Category 2)  
H331 - Acute toxicity, Inhalation (Category 3)  
H411 - Skin sensitisation (Category 1),

### SECTION 3: HAZARDS IDENTIFICATION

**Potential Acute Health Effects:** Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** 3 (Not classifiable for human.) by IARC.

**MUTAGENIC EFFECTS:** Not Available.

**TERATOGENIC EFFECTS:** Not Available.

**DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female [POSSIBLE].

The substance may be toxic to blood, kidneys, liver, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

### SECTION 4: FIRST AID MEASURES

**Eye Contact:** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin contact:** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Serious Inhalation:** Not Available.



**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately. **Serious Ingestion:** Not available.

## SECTION 5: FIRE FIGHTING MEASURES

**Flammability of the Product:** Non-flammable.  
**Auto-Ignition Temperature:** Not applicable.  
**Flash Points:** Not applicable.  
**Flammable Limits:** Not applicable.  
**Products of Combustion:** Not available.  
**Fire Hazards in Presence of Various Substances:** Not applicable.  
**Explosion Hazards in Presence of Various Substances:**  
**Risks of explosion of the product in presence of mechanical impact:** Not available.  
**Risks of explosion of the product in presence of static discharge:** Not available.  
**Fire Fighting Media and Instructions:**  
**SMALL FIRE:** Use DRY chemical powder.  
**LARGE FIRE:** Use water spray, fog or foam. Do not use water jet.  
**Special Remarks on Fire Hazards:** Not available.  
**Special Remarks on Explosion Hazards:** Not available.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.  
**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## SECTION 7: HANDLING AND STORAGE

**Precautions:** Do not ingest. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.  
**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.  
**Personal Protection:** Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.  
**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.  
**Exposure Limits:** Not Available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance	:	Solid crystal powder
Odor	:	Not available
Color	:	White.

Molecular Weight	:	Not available
pH	:	Not available
Boiling Point	:	Decomposition temperature: 710°C (1310°F).
Melting Point	:	Decomposition temperature: 710°C (1310°F).
Critical Temperature	:	Not available
Specific Gravity	:	Not available
Vapor Pressure	:	Not available
Vapor Density	:	5.96 (Air = 1).
Volatility	:	Not available
Odor Threshold	:	Not available
Water/Oil Dist. Coeff.	:	Not available
Ionicity (in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Soluble in water

## SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials.

**Incompatibility with various substances:** Reactive with acids

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Routes of Entry:** Absorbed through skin. Dermal contact. Inhalation. Ingestion.

**Toxicity to Animals:**

**LD<sub>50</sub>:** Oral – Guinea pig – 5.06 mg/Kg.

**LC<sub>50</sub>:** Not available.

**Chronic Effects on Humans:** 3 (Not classifiable for human.) by IARC. Mutagenic for bacteria and/or yeast. Classified Reproductive system/toxin/female [POSSIBLE]. May cause damage to the following organs: blood, kidneys, liver, skin, central nervous system (CNS).

**Other Toxic Effects on Humans:** Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** May cause adverse reproductive effects (paternal and maternal).

Embryotoxic and/or foetotoxic in animal. May affect genetic material (mutagenic). May cause cancer based on animal data.

**Special Remarks on other Toxic Effects on Humans:** Causes skin irritation, dermatitis, and flushing. causes severe eye irritation. May cause respiratory tract and mucous membrane irritation with coughing, nasal discharge, epistaxis, and olfactory fatigue, pulmonary edema, metal fume fever (symptoms include: chills, fever, headache), bronchitis, pneumonitis, transient dyspnea. Ingestion: Causes gastrointestinal irritation with nausea, vomiting, diarrhea, salivation, and gastrointestinal pain. Also causes halitosis or a garlic-like odor of the breath and affects behavior/central nervous system (CNS depression, restlessness, muscle contraction, weakness, tremor, or spaticity, convulsions, lightheaded sensation, sluggish pupillary reflexes, somnolence), blood (leukopenia), urinary system (bladder, kidneys), cardiovascular system, and liver (dengeneration and cirrhosis). It is absorbed through the skin. Effects of chronic or prolonged exposure by skin contact may include dermatitis, hair discoloration, alopecia. It may also affect behavior (convulsions). Ingestion: Chronic or prolonged exposure by ingestion may affect the blood (anemia, leukocytosis), liver (hepatic necrosis, hemorrhage, cirrhosis), urinary system (kidneys, bladder). It may also cause metallic taste, garlic-like odor on the breath, paleness, coated tongue, nervousness, irritability, fatigue, and hyperreflexia.



## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not Available.

**BOD and COD:** Not available.

**Products of Biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## SECTION 14: TRANSPORT INFORMATION

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** UNNA: 2630: Sodium hydrogen selenite, PG: I.

**Special Provisions for Transport:** Not Available.

## SECTION 15: REGULATORY INFORMATION

**Federal and State Regulations:** TSCA 8(b) inventory: Sodium Selenite.

**Other Regulations:** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):** R28/R38/R40/R41/R62.

**HMIS (U.S.A.):**

**Health Hazard:** 3

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 3

**Flammability:** 0

**Reactivity:** 0

**Specific hazard:** Not Available.

**Protective Equipment:** Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

## SECTION 16: OTHER INFORMATION

**References: Full text of H AND R-Statements.**

H300 - Acute toxicity, Oral (Category 2) - Fatal if swallowed.

H317 Chronic aquatic toxicity (Category 2) - May cause an allergic skin reaction

H331 - Acute toxicity, Inhalation (Category 3) - Toxic if inhaled

H411 - Skin sensitization (Category 1) - Toxic to aquatic life with long lasting effects

**Other Special Considerations:** Not Available.



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