



MATERIAL SAFETY DATA SHEET

Section 1. Company Identification and Product Information

Product Name or Identity:	Selenite Broth		
Manufacturer's Name:	Acumedia Manufacturers, Inc.	Emergency Phone No.:	517/372-9200
	740 East Shiawassee	Fax No.:	517/372-0108
	Lansing, Michigan 48912	e-mail:	foodsafety@neogen.com
Date Prepared or Revised:	February 2008	Chemtrec: (800) 424-9300	
		Outside US and Canada: (703) 527-3887	

Section 2. Composition / Information on Hazardous Ingredients

This product is a mixture of the substances listed below with the addition of nonhazardous materials.

Hazardous Components Specific Chemical Identity:	CAS-No.	%	Hazard Symbol
Sodium Phosphate	7558-79-4	43.5%	Xi (Irritant)
Sodium Selenite	10102-18-8	17.4%	Xn (Harmful)

Section 3. Health Hazard Identification

Health Hazards: (Acute and Chronic)	Information pertaining to particular dangers for man and environment. R 20 / 22 Harmful by inhalation and if swallowed. R 33 Danger of cumulative effects. R 37 Irritating to respiratory system.
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Section 4. First Aid Measures

Emergency / First Aid Procedures:	General Information: Symptoms of poisoning may occur after several hours; provide medical observation for at least 48 hours exposure.
	Ingestion: If swallowed, seek medical attention immediately. Show physician product label or MSDS.
	Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention if breathing becomes labored or difficult.
	Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and upper eyelids occasionally. Seek medical attention.
	Skin Contact: Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes. Seek medical attention if irritation develops. Wash clothing before reuse.

Section 5. Fire and Explosion Hazard Data

Flash Point (Method Used): N/A	Flammable Limits: LEL – N/A UEL – N/A
Extinguishing Media: Use CO ₂ , ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.	
Protective Equipment: No special measures required.	
Unusual Fire and Explosion Hazards: During heating or in case of fire, poisonous gases may be produced.	

**Section 6. Accidental Release Measures**

Personal Precautions: Wear suitable protective clothing. Remove contaminated clothing. Ensure good ventilation / exhaustion at the workplace.

Environmental Precautions: Prevent dispersion of material. Wipe up with damp sponge or mop.

Clean-up Methods: Avoid prolonged or repeated exposure. Absorb material, ventilate area, and wash spill site after material has been cleaned up. Avoid inhalation, contact with eyes and skin. Prevent formation of dust.

Section 7. Handling and Storage

Handling: Protect against physical damage. Ensure good ventilation / exhaustion.

Storage: Requirements to be met by storerooms and receptacles: < 30°C.
Do not store together with oxidizing agents and acidic materials. Store away from reducing agents. Store in cool, dry conditions in well sealed containers.

Other Precautions: Keep respiratory protective device available.

Section 8. Exposure Controls / Personal Protection

Components with limit values that require monitoring:
Sodium Selenite (10102-18-8)

OSHA-PEL: 0.2 mg/m³ as Se

REL: 0.2 mg/m³ as Se

TLV: 0.2 mg/m³ as Se

Additional Information: Personal Protection listed below are general requirements for laboratory personnel. Follow the usual precautionary measures for handling chemicals / powder. Avoid contact with eyes, skin, and clothing.

Personal Protective Equipment:

Keep away from food, beverages, and feed.
Wash hands before and after entering laboratory.
Immediately remove all soiled and contaminated clothing.
Avoid contact with eyes and skin.

Breathing Equipment: In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respiratory.

Hand Protection: Use chemical resistant gloves.

Eye Protection: Wear safety glasses.

Body Protection: Wear lab coat or other protective work clothing.

Section 9. Physical and Chemical Properties

Appearance and Odor: Homogenous, free-flowing powder, off white with characteristic odor.

Boiling Point: Not determined

Density: Not determined

Flash Point: Not applicable

Melting Point: Not determined

Auto Igniting: Product is not self-igniting

Solubility in Water: Soluble

Danger of explosion: Product does not present an explosion hazard.

pH: 7.0 ± 0.2 @ 25°C

Solvent Content: Organic solvents – 0.0%

Solids Content: 100.0%

**Section 10. Stability and Reactivity**

Stability:	Unstable		
	Stable	X	Conditions to Avoid: Stable under recommended storage conditions.
Incompatibility (Materials to Avoid): Incompatible with strong oxidizing agents, mineral acids, and reducers.			
Hazardous Decomposition or Byproducts: Carbon dioxide (CO ₂), Phosphorus oxides (POx), and selenium/selenium oxides (Se/SeOx).			
Hazardous Polymerization:	May Occur		
	Will Not Occur	X	No dangerous reactions known.

Section 11. Toxicological Information**LD/LC50 values that are relevant:**LD₅₀: ORL-RAT, 7 mg/ kg, **Sodium selenite (10102-18-8)****Carcinogenicity Classification: Sodium Selenite (10102-18-8)****IARC (International Agency for Research on Cancer) – Group 3****NTP (National Toxicology Program) - R****Irritant:** Irritant to skin and mucous membranes. Irritating effect on the eyes.**Sensitization:** No sensitizing effects known.**Other:** This product has a LD₅₀ of 40.2 mg/kg (ORL-RAT) based on Sodium Selenite content.**Subacute to chronic toxicity:** Target organs, kidney, spleen, and liver.**Additional toxicological information:** Harmful, Irritant.**Section 12. Ecological Information****Ecotoxicity Tests:**

Water Hazard Class 2: Hazardous for water. The ecological effects have not been thoroughly investigated, but currently none have been identified.

Section 13. Disposal Considerations**Waste Disposal Method:** Dispose in accordance with all applicable federal (40 CFR 261.3), state, and local environmental regulations. Keep waste separate, must not be disposed of with solid waste.

RCRA Hazardous Waste – RCRA # D010 (Selenium).

Contact a licensed professional waste disposal service to dispose of this material if questions arise.

Container Information: Do not remove labels from containers until they have been cleaned.**Section 14. Transport Information****DOT Regulations:**

Toxic

Hazard Class: 6.1

Identification Number: UN 3283

Packing Group II:

Proper Shipping Name: Selenium Compound, Solid, N.O.S., (Sodium selenite)

Land Transport ADR/RID (cross-border)

Toxic.

ADR/RID Class: 6.1 (T5) Toxic substances

UN Number: UN 3283

Packaging Group: II

Description of Goods: Selenium Compound, Solid, N.O.S. (Sodium selenite)



Maritime Transport IMDG:

Toxic
IMDG Class: 6.1
UN Number: 3283
Packing Group: II
EMS Number: F-A, S-A
Marine Pollutant: Yes
Proper Shipping Name: Selenium Compound, Solid, N.O.S. (Sodium selenite)
Remarks: Limited quantity

Air Transport ICAO-TI and IATA-DGR:

Toxic
ICAO/IATA Class: 6.1
UN/ID Number: 3283
Label: 6.1
Packaging Group: II
Proper Shipping Name: Selenium Compound, Solid, N.O.S., (Sodium selenite)
Remarks: Limited quantity

Section 15. Regulatory Information

EU Regulations, Hazard Symbol(s):

Sodium Phosphate: Xi (Irritant)

Sodium Selenite: Xn (Harmful)

Risk Phrases:

R 20 / 22 Harmful by inhalation and if swallowed.
R 33 Danger of cumulative effects.
R 37 Irritating to respiratory system.

Safety Phrases:

S 9 Keep container in a well-ventilated place.
S 20 / 21 When using do not eat, drink or smoke.
S 28 After contact with skin, wash immediately with plenty of soap and water.
S 36 Wear suitable protective clothing.
S 60 This material and its container must be disposed of as hazardous waste.

Section 16. Other Information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Acumedia Manufacturers, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.