

Date Prepared: 11/10/2009

Reviewed On: 01/31/2009

1 Identification of substance:

- **Product name:** Selenite Cystine Broth
- **Catalog number:** 268740
- **Manufacturer/Supplier:**
 BD Diagnostic Systems
 7 Loveton Circle
 Sparks, MD 21152
 Telephone: (410) 771 - 0100 or (800) 638 - 8663
- **Information department:** Technical Services
- **Emergency information:**
 In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture consisting of the following components.

- **Dangerous components:**

7558-79-4	sodium phosphate, dibasic	43.46%
10102-18-8	sodium selenite	17.4%

3 Hazards identification

- **Hazard description:**



Xn Harmful

- **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.

- **Classification system**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **NFPA ratings (scale 0-4)**



Health = 3

Fire = 0

Reactivity = 0

- **HMIS ratings (scale 0-4)**



Health = 3

Fire = 0

Reactivity = 0

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4 First aid measures**· General information**

Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

- **After inhalation** Seek medical treatment in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.
- **Information for doctor** Show this product label or this MSDS.
- **The following symptoms may occur:**

Nausea
Dizziness
Headache

5 Fire fighting measures**· Suitable extinguishing agents**

CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards caused by the material, its products of combustion or resulting gases:

Formation of toxic gases is possible during heating or in case of fire.

- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting:** Ensure adequate ventilation.
- **Additional information:**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling**
- **Information for safe handling:** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** < 30 °C
- **Information about storage in one common storage facility:**
Do not store together with oxidizing and acidic materials.
Store away from reducing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

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8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal Protective Equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
- **Protection of hands:**



Chemical resistant gloves (i.e. nitrile, or equivalent).

- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

9 Physical and chemical properties:

· General Information

Form:	Solid. Powder
Color:	Whitish
Odor:	Characteristic

· Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined

· Flash point:	Not applicable
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· Auto igniting:	Product is not self igniting.
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· Danger of explosion:	Product does not present an explosion hazard.
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· Density:	Not determined
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· Solubility in / Miscibility with

Water:	Soluble
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· pH-value:	7.0 +/- 0.2
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· Solvent content:

Organic solvents:	0.0 %
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· Solids content:	100.0 %
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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:**
Carbon dioxide (CO₂)
Phosphorus oxides (PO_x)

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

10102-18-8 sodium selenite

Oral LD50 7 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** No irritating effect.
 - **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

12 Ecological information:

- **Ecotoxicological effects:**
- **Other information:**
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of with solid waste.
Must adhere to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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14 Transport information

· DOT regulations:



- **Hazard class:** 6.1
- **Identification number:** UN3283
- **Packing group:** II
- **Proper shipping name:** SELENIUM COMPOUND, SOLID, N.O.S. (sodium selenite)
- **Label** 6.1
- **Remarks:** Special marking with the symbol (fish and tree).

· TDG (Transport dangerous goods):



- **TDG class:** 6.1 (T5) Toxic substances
- **Danger code (Kemler):** 66
- **UN-Number:** 3283
- **Packaging group:** II
- **Description of goods:** 3283 SELENIUM COMPOUND, SOLID, N.O.S. (sodium selenite)

· Maritime transport IMDG:



- **IMDG Class:** 6.1
- **UN Number:** 3283
- **Label** 6.1
- **Packaging group:** II
- **EMS Number:** F-A,S-A
- **Marine pollutant:** Yes
Symbol (fish and tree)
- **Proper shipping name:** SELENIUM COMPOUND, SOLID, N.O.S. (sodium selenite)

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 6.1
- **UN/ID Number:** 3283
- **Label** 6.1
- **Packaging group:** II

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Proper shipping name: SELENIUM COMPOUND, SOLID, N.O.S.

15 Regulations

· SARA Section 355 (extremely hazardous substances)

10102-18-8 sodium selenite

· SARA Section 313 (specific toxic chemical listings)

10102-18-8 sodium selenite

· TSCA (Toxic Substances Control Act)

7558-79-4 sodium phosphate, dibasic

10102-18-8 sodium selenite

63-42-3 lactose

56-89-3 L-cystine

· Carcinogenicity categories

· NTP (National Toxicology Program)

10102-18-8 sodium selenite

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· TLV (Threshold Limit Value established by ACGIH)

10102-18-8 sodium selenite

0.2 mg/kg as Se

· Canadian Substance Listing

· Canadian Domestic Substance List (DSL)

7558-79-4 sodium phosphate, dibasic

10102-18-8 sodium selenite

63-42-3 lactose

56-89-3 L-cystine

· Canadian Ingredient Disclosure List (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure List (limit 1%)

None of the ingredients is listed.

· Product related hazard information:

This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

· Hazard symbols:

Xn Harmful

· Hazard-determining components of labeling:

sodium selenite

sodium phosphate, dibasic

· Risk phrases:

20/22 Harmful by inhalation and if swallowed.

33 Danger of cumulative effects.

37 Irritating to respiratory system.

· Safety phrases:

9 Keep container in a well-ventilated place.

20/21 When using do not eat, drink or smoke.

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Material Safety Data Sheet

acc. to ISO/DIS 11014

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- 36 Wear suitable protective clothing.
60 This material and its container must be disposed of as hazardous waste.

• **National regulations**

- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards that exist.

• **Department issuing MSDS:**

Safety and Environment Department

MSDS created by Michael J. Spinazzola

- **Contact:** Technical Service Representative

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