

### 1 Identification of substance:

- **Product name:** Tetrathionate Broth Base
- **Catalog number:** 210420
- **Manufacturer/Supplier:**  
BD Diagnostic Systems  
7 Loveton Circle  
Sparks, MD 21152  
Tel: (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 at (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:**

7772-98-7	sodium thiosulfate	65.2%
8008-63-7	oxgall	2.16%

### 3 Hazards identification

· **Hazard description:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**  
R 36/37/38 Irritating to eyes, respiratory system and skin.
- **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 = 2  
Fire = 0  
Reactivity = 0

### 4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor 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** If symptoms persist consult doctor.

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· **Information for doctor** Show this product label or this MSDS.

### 5 Fire fighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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:** No special measures required.
- **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:** No special measures required.
- **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.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed containers.

### 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:**

**calcium carbonate**

PEL	15*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
REL	10*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
TLV	10 mg/m <sup>3</sup> (e)

- **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.  
Immediately remove all soiled and contaminated clothing.

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Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**· 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:** Powder  
**Color:** Whitish  
**Odor:** Characteristic

**· Change in condition** Undetermined  
**· Melting point/Melting range:** Not determined  
**· Boiling point/Boiling range:** Not determined

**· Flash point:** Not applicable

**· Auto igniting:** Product is not self igniting.

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

**· Density:** Not determined

**· Solubility in / Miscibility with Water:** Partly soluble

**· pH-value:** 8.4 +/- 0.2

**· Solvent content:**

**· Solids content:** 100.0 %

**10 Stability and reactivity**

**· Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.

**· Materials to be avoided:**

Incompatible materials: acidic material and metals

Incompatible material: strong oxidizers.

**· Dangerous reactions** No dangerous reactions known

**· Dangerous products of decomposition:**

Carbon dioxide (CO<sub>2</sub>)

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**Product name: Tetrathionate Broth Base**Sulfur oxides (SO<sub>x</sub>)

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**11 Toxicological information**

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Target organs: respiratory tract, eyes, kidneys, and skin.
- **Additional toxicological information:**

Irritant

The product shows the following dangers according to internally approved calculation methods for preparations:

**12 Ecological information:**

- **Ecotoxicological effects:**
- **Other information:**  
The ecological effects have not been thoroughly investigated, but currently none have been identified.
- **General notes:** Generally not hazardous for water.

**13 Disposal considerations**

- **Product:**
- **Recommendation**  
Smaller quantities can be disposed of with solid waste.  
This product is not considered a RCRA hazardous waste.  
Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to state and federal regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No

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- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

### 15 Regulations

- **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

- **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act)**

7772-98-7	sodium thiosulfate
	calcium carbonate
9000-71-9	casein
77-92-9	citric acid

- **California Proposition 65 - Chemicals known to cause cancer**

None of the ingredients is listed.

- **California Proposition 65 - Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **California Proposition 65 - Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **California Proposition 65 - Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenicity categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **Product related hazard information:**

The product has been classified and marked in accordance with regulations on hazardous materials.

- **Hazard symbols:**

Xi Irritant

- **Hazard-determining components of labeling:**

sodium thiosulfate

oxgall

- **Risk phrases:**

36/37/38 Irritating to eyes, respiratory system and skin.

- **Safety phrases:**

7 Keep container tightly closed.

22 Do not breathe dust.

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**Material Safety Data Sheet**  
*acc. to ISO/DIS 11014*

Printing date 01/11/2006

Reviewed on 12/03/2003

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24/25 Avoid contact with skin and eyes.  
36 Wear suitable protective clothing.

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**16 Other information:**

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- **Department issuing MSDS:** Safety and Environment Department
- **Contact:** Technical Service Representative

USA