SECTION 1 Identification of the substance/mixture and of the company

1.1 Product identifier
- Product Name: Selenite Broth
- Product Part Number: 7155

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Use of the substance/preparation: For the selective enrichment of *Salmonella* spp.
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet
- Name of Manufacturer: Acumedia Manufacturers, Inc.
- Address of Manufacturer: 740 East Shiawassee
  Lansing, Michigan 48912
  USA
- Telephone: 517/372-9200
- Email: Foodsafety@neogen.com

1.4 Emergency telephone number
- Emergency Telephone: Chemtrec: 1 (800) 424-9300
  Outside USA and Canada: +1 (703) 527-3887

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture
Classification (29 CFR 1910.1200)
- Acute toxicity, oral, Cat 3, H301, Acute toxicity, inhalation, Cat. 3, H331, Skin sensitization, Cat. 1, H317, Hazardous to the aquatic environment, long-term hazard, Cat. 2, H411

Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Acute tox. 3, H301, Acute tox. 3, H331, Skin sens. 1, H317, Aquatic chronic 2, H411

Classification (WHMIS 2015 HPR)
- Acute toxicity, oral, Cat 3, H301, Acute toxicity, inhalation, Cat. 3, H331, Skin sensitization, Cat. 1, H317, Hazardous to the aquatic environment, long-term hazard, Cat. 2, H411

Additional information: For full text of Hazard-statements see Section 16.

2.2 Label elements

- Signal Word: Danger
- Symbols: GHS06, GHS07
- Hazard phrases
  Toxic if swallowed
  Toxic if inhaled.
  May cause an allergic skin reaction
  Toxic to aquatic life with long lasting effects.
- Precautionary Phrases
  Wash hands thoroughly after handling.
  Avoid breathing dust/fume/gas/mist/vapors/spray.
  Do not eat, drink or smoke while using this product.
  Use only outdoors or in a well-ventilated area.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Contaminated work clothing should not be allowed out of the workplace.
  IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
  Rinse mouth.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.
  IF ON SKIN: Wash with plenty of soap and water.
  IF SKIN irritation or rash occurs: Get medical advice/attention.
  Take off contaminated clothing and wash it before reuse.
SECTION 2  Hazards identification (continued)

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Avoid release into environment.
Collect spillage. Hazardous to the aquatic environment.
Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards
- May be mildly irritating to eyes and mucous membranes.

SECTION 3  Composition/information on ingredients

3.1 Substances
3.2 Mixtures
- This product is a mixture of the substances listed below with the addition of non-hazardous materials

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Concentration</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>H-Statements</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Selenite</td>
<td>15 – 20%</td>
<td>10102-18-8</td>
<td>233-267-9</td>
<td>H301, H317, H331, H411</td>
<td>GHS06, GHS07</td>
</tr>
</tbody>
</table>

SECTION 4  First aid measures

4.1 Description of first aid measures
- General
  In case of doubt, or when symptoms persist, seek medical attention.
- Contact with skin
  May cause an allergic skin reaction.
  Remove contaminated clothing.
  Wash affected area with plenty of soap and water.
  If skin irritation or rash occurs: Get medical advice/attention.
  Contaminated clothing should be laundered before reuse.
- Contact with eyes
  If substance has gotten into eyes, rinse with plenty of water for at least 15 minutes.
  Irrigate eyes thoroughly while lifting eyelids.
  Seek medical advice if necessary.
- Ingestion
  Toxic if swallowed.
  Rinse mouth with water (do not swallow).
  Never make an unconscious person vomit or drink fluids.
  Immediately call a POISON CENTER or doctor/physician.
  If medical advice is needed, have product container or label at hand.
- Inhalation
  Toxic if inhaled.
  Remove person to fresh air and keep comfortable for breathing.
  Immediately call a POISON CENTER or doctor/physician.
  If medical advice is needed, have product container or label at hand.

4.2 Most important symptoms and effects, both acute and delayed
- The most important known symptoms are described in the labeling (see Section 2.2) and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically.

SECTION 5  Fire-fighting measures

5.1 Extinguishing media
- In case of fire: use foam, carbon dioxide or dry agent for extinction.

5.2 Special hazards arising from the substance or mixture
- Smoke from fires is toxic. Take precautions to protect personnel from exposure.
- Decomposition products may include carbon oxides.
- See Section 10.
SECTION 5 Fire-fighting measures (continued)

5.3 Advice for firefighters
- Keep container(s) exposed to fire cool, by spraying with water.
- Wear chemical protection suit and positive-pressure breathing apparatus.
- Wear protective clothing as per Section 8.

5.4 Hazardous Combustion Products
- May include carbon oxides.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Shut off all ignition sources.
- Remove contaminated clothing.
- Wear protective clothing as per Section 8.
- Wash thoroughly after dealing with spillage.

6.2 Environmental Precautions
- Do not allow to enter public sewers and watercourses.
- Avoid scattering in the environment.

6.3 Methods and material for containment and cleaning up
- Absorb spillage in inert material and shovel up.
- Place in sealable container.
- Seal containers and label them.
- Ventilate the area and wash spill site after material pick-up is complete.
- Dispose of contaminated materials and wastes in accordance with local/national/international hazardous waste regulations.

6.4 Reference to other sections
- See Section 7 for storage. For disposal, see Section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling
- Do not breathe dust.
- Avoid contact with skin and eyes.
- Do not eat, drink, or smoke when using this product.
- Ensure adequate ventilation.
- Eyewash bottles should be available.
- Wash hands thoroughly after using this substance.

7.2 Conditions for safe storage, including any incompatibilities
- Store at temperatures not exceeding 30°C/86°F. Keep cool.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a dry place.
- Keep away from oxidizing substances.

7.3 Specific end use(s)
- For the selective enrichment of *Salmonella* spp.

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Value</th>
<th>Control Parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium selenite</td>
<td>10102-18-8</td>
<td>TWA 0.2 mg/m³</td>
<td>USA-OSHA Table Z-1 Limits for Air Contaminants - 1910.1000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 0.2 mg/m³</td>
<td>USA-NIOSH Recommended Exposure Limits</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA 0.2 mg/m³</td>
<td>[TLV]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>WEL 0.1 mg/m³</td>
<td>UK EH40, long term</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 8 Exposure controls/personal protection (continued)

8.2 Exposure controls
- Eyewash bottles should be available.
- Engineering controls should be provided to prevent the need for ventilation.
- No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved respiratory protection, NIOSH N95 (US) or type FFP1 (EN143) dust masks.
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for ANSI Z87 or EN 166.
- Wear suitable protective clothing in accordance with good chemical hygiene practices.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
- Appearance: Homogenous, free-flowing powder, off-white
- Odor: No information available
- pH: No information available
- Melting Point/Range: No information available
- Boiling Point/Range: Not applicable
- Flashpoint: No information available
- Evaporation Rate: Not applicable
- Flammability: No information available
- Vapor Pressure: No information available
- Vapor Density: No information available
- Specific Gravity: No information available
- Solubility in water: Soluble
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: Product is not self-igniting
- Viscosity: Product is free-flowing powder
- Explosive Properties: Product does not present an explosion hazard
- Oxidizing Properties: Product is not classified as an oxidizer

9.2 Other information
- No information available

SECTION 10 Stability and reactivity

10.1 Reactivity
- No information available

10.2 Chemical stability
- Considered stable under normal conditions.

10.3 Possibility of hazardous reactions
- No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid
- Avoid contact with moisture.
- Keep away from heat and sources of ignition.

10.5 Incompatible materials
- None known

10.6 Hazardous Decomposition Products
- Decomposition products may include carbon oxides.
SECTION 11  Toxicological information

11.1 Information on toxicological effects

- No experimental test data available for the mixture
- \( \text{ATE}_{\text{mix}} = 29 \, \text{mg/kg (oral)} \)
- Contact with skin
  May cause an allergic skin reaction.
- Contact with eyes
  May cause redness and irritation in sensitive individuals.
- Ingestion
  Toxic if swallowed.
- Inhalation
  Toxic if inhaled.
- Carcinogenicity
  Not listed in the National Toxicology Program (NTP) 13th Report on Carcinogens.
  Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-112.
  Not listed in OSHA standard 1910.1003 Carcinogens.
- Mutagenicity
  No evidence of mutagenic effects.
- Teratogenicity
  No evidence of teratogenic effects

SECTION 12  Ecological information

12.1 Toxicity

**Sodium selenite**

Toxicity to fish

LC\(_{50}\) – *Onchorhynchus mykiss* (Rainbow trout) – 2.75 mg/L-96h

Toxicity to daphnia and other aquatic invertebrates

LC\(_{50}\) – *Daphnia Magna* (water flea) – 0.25 mg/L-48h

Mortality LOEC – *Daphnia magna* (water flea) – 0.52 mg/L-21d

12.2 Persistence and degradability
- No information available

12.3 Bioaccumulation Potential

Bioaccumulation: *Lepomis macrochirus* – 120d

Bioconcentration factor (BCF): 1850

12.4 Mobility in soil
- No information available

12.5 Results of PBT and vPvB assessment
- Not a PBT according to REACH Annex XIII
- PBT/vPvB assessment not available

12.6 Other Adverse Effects
- To the best of our knowledge, the properties of this material have not been fully evaluated.

SECTION 13  Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, regional, national, and/or international hazardous waste regulations.
- Do not discharge into drains or the environment, dispose to an authorized waste collection point.
- Do not reuse empty containers.

13.2 Classification (REACH)

- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.
SECTION 14  Transport information
14.1 UN Number
   3283
14.2 UN Proper Shipping Name
   - Selenium compound, solid, n.o.s. (Sodium selenite mixture)
14.3 Transport hazard class(es)
   - 6.1
14.4 Packing group
   - III
14.5 Environmental hazards
   - Not a marine pollutant
14.6 Special precautions for user
   - None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
   - Not classified
14.8 Domestic Surface Transport (US DOT)
   - Proper Shipping Name: Selenium compound, solid, n.o.s. (Sodium selenite mixture)
     - DOT UN No.: 3283
     - DOT Hazard Class: 6.1
     - DOT Packing Group: III
14.9 International Road/Rail (ADR/RID)
   - Proper Shipping Name: Selenium compound, solid, n.o.s. (Sodium selenite mixture)
     - ADR UN No.: 3283
     - ADR Hazard Class: 6.1
     - ADR Packing Group: III
     - Tunnel Code: 2 (E)
14.10 Ocean/Sea (IMO/IMDG)
   - Proper Shipping Name: Selenium compound, solid, n.o.s. (Sodium selenite mixture)
     - IMDG UN No.: 3283
     - IMDG Hazard Class: 6.1
     - IMDG Packing Group: III
14.11 Air (ICAO/IATA)
   - Proper Shipping Name: Selenium compound, solid, n.o.s. (Sodium selenite mixture)
     - ICAO UN No.: 3283
     - ICAO Hazard Class: 6.1
     - ICAO Packing Group: III

SECTION 15  Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
   - This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006- 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.
15.2 Chemical Safety Assessment
   - No information available
15.3 United States Regulatory Information
   SARA 302 Components
   The following components are subject to reporting levels established by SARA Title II, Section 302: Sodium Selenite, CAS No. 10102-18-8
   SARA 313 Components
   The following components are subject to reporting levels established by SARA Title III, Section 313: Sodium Selenite, CAS No. 10102-18-8
SECTION 15  Regulatory information (continued)

SARA 311/312

<table>
<thead>
<tr>
<th>Category</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

**Toxic Substance Control Act (TSCA)**

All components of this material are either listed or exempt from listing on the TSCA Inventory.

**State Right-to-Know**

- **Massachusetts**
  - Sodium selenite, CAS No. 10102-18-8
  - Sodium phosphate dibasic, CAS No. 7558-79-4

- **New Jersey**
  - Sodium selenite, CAS No. 10102-18-8
  - Sodium phosphate dibasic, CAS No. 7558-79-4

- **Pennsylvania**
  - Sodium selenite, CAS No. 10102-18-8
  - Sodium phosphate dibasic, CAS No. 7558-79-4

**15.4 Canadian Regulatory Information**

- **Inventory Status**
  - Domestic Substances List (DSL)  Listed
  - Non-Domestic Substances List (NDSL)  Not listed

- **Hazards not otherwise classified**
  - PHNOC: Combustible dust > 1000lbs/454kg

SECTION 16  Other information

Date of Preparation: June 2016
Revision: Rev. 0
Replaces: New issue

Text not given with phrase codes where they are used elsewhere in this safety data sheet: H301: Toxic if swallowed. H317: May cause an allergic skin reaction. H331: Toxic if inhaled. H411: Toxic to aquatic wildlife with long lasting effects.

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation 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.