



SAFETY DATA SHEET

according to 29 CFR 1910.1200 and GHS

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Tetrathionate Broth Base

Revision 2
Revision date 2020-02-11

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

1.1. Product identifier

| | |
|--------------|--------------------------|
| Product name | Tetrathionate Broth Base |
| Product code | NCM0092, LAB097, 7241 |

1.2. Relevant identified uses of the substance or mixture and uses advised against

| | |
|-------------|---|
| Product Use | [SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC21] Laboratory chemicals; [PROC15] Use as laboratory reagent; |
| Description | Intended for laboratory use only. |

1.3. Details of the supplier of the safety data sheet

| | |
|-----------|--|
| Company | Neogen Corporation |
| Address | 620 Leshler Place Lansing MI 48912 USA |
| Web | www.neogen.com |
| Telephone | 517-372-9200/800-234-5333 |
| Email | SDS@neogen.com |

1.4. Emergency telephone number

24 hours:
Medical: 1-800-498-5743 (U.S. and Canada) or 1-651-523-0318 (international)
Spill/CHEMTREC: 1-800-424-9300 (U.S. and Canada) or 1-703-527-3887 (international)

Further information

Manufactured By:
Neogen Corporation
740 East Shiawassee
Lansing, MI 48912 U.S.A.

Neogen Corporation
1 Quest Park-Moss Hall Road
Heywood Lancashire BL97JJ UK.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


| | |
|-----------------------------|---|
| 2.1.2. Classification - GHS | STOT SE 3: H335; Carc. 1A: H350; STOT RE 1: H372; |
|-----------------------------|---|

2.2. Label elements

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2.2. Label elements

| | |
|-------------------------------------|--|
| Hazard pictograms |  |
| Signal Word | Danger |
| Hazard Statement | STOT SE 3: H335 - May cause respiratory irritation. Carc. 1A: H350 - May cause cancer . STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure . |
| Precautionary Statement: Prevention | P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves/protective clothing/eye protection/face protection. |
| Precautionary Statement: Response | P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308+P313 - IF exposed or concerned: Get medical advice/attention. |
| Precautionary Statement: Storage | P403+P233 - Store in a well-ventilated place. Keep container tightly closed. |
| Precautionary Statement: Disposal | P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in accordance with local and national regulations |

2.3. Other hazards

| | |
|---------------|--|
| Other hazards | Respirable dust. For exposure limits, see Section 8. |
|---------------|--|

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC 1272/2008

| Chemical Name | Index No. | CAS No. | EC No. | REACH Registration Number | Conc. (%w/w) | Classification |
|-------------------------------|-----------|------------|-----------|---------------------------|--------------|---|
| Sodium thiosulfate, anhydrous | | 7772-98-7 | 231-867-5 | | 60 - 70% | |
| Calcium carbonate | | 471-34-1 | 207-439-9 | | 20 - 30% | STOT SE 3: H335; Carc. 1A: H350; STOT RE 1: H372; |
| Special Bile | | 68990-09-0 | 273-578-7 | | 1 - 10% | Skin Irrit. 2: H315; Eye Irrit. 2: H319; |

Description

| | |
|--|---|
| | Concentrations listed are not product specifications. |
|--|---|

Further information

| | |
|--|--|
| | Full text of Hazard Statements listed in this Section is provided in Section 16. |
|--|--|

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------|--|
| Inhalation | Move the exposed person to fresh air. If breathing is difficult give oxygen. If breathing stops, provide artificial respiration. Seek medical attention if irritation or symptoms persist. |
| Eye contact | Rinse immediately with plenty of water. Contact lenses should be removed. Seek medical attention if irritation or symptoms persist. |
| Skin contact | Remove contaminated clothing. Wash with soap and water. Seek medical attention if irritation or symptoms persist. |

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4.1. Description of first aid measures

| | |
|-----------|---|
| Ingestion | Do not induce vomiting unless told to do so by the poison control center or doctor. Rinse mouth thoroughly. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. |
|-----------|---|

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--------------|--|
| Inhalation | May cause irritation to respiratory system. |
| Eye contact | May cause irritation to eyes. |
| Skin contact | May cause irritation to skin. |
| Ingestion | May cause cancer. Ingestion may cause nausea and vomiting. |

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

| | |
|--|--|
| | Remove the affected person from the source of contamination immediately. Transfer to hospital if there are burns or symptoms of poisoning. Seek medical attention if irritation or symptoms persist. If medical advice is needed, have product container or label at hand. |
|--|--|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--|---|
| | Use extinguishing media appropriate to the surrounding fire conditions. |
|--|---|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---|
| | Respirable dust. For exposure limits, see Section 8. May form combustible dust/air mixture. |
|--|---|

5.3. Advice for firefighters

| | |
|--|---|
| | Do not breathe dust or vapor. Wear suitable respiratory equipment when necessary. |
|--|---|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|--|--|
| | Avoid formation of dust. Use as appropriate: Protective equipment, Protective clothing. Ensure adequate ventilation of the working area. Avoid prolonged or repeated exposure. |
|--|--|

6.2. Environmental precautions

| | |
|--|---|
| | Prevent further spillage if safe. Clean spillage area thoroughly with plenty of water. Do not flush into surface water. Do not let product contaminate subsoil. |
|--|---|

6.3. Methods and material for containment and cleaning up

| | |
|--|--|
| | Avoid formation of dust. Clean spillage area thoroughly with plenty of water. Do not contaminate water by cleaning of equipment or disposal of wastes. |
|--|--|

6.4. Reference to other sections

| | |
|--|--|
| | See Section(s) 2, 8, and 13 for further information. |
|--|--|

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|--|--|
| | Adopt best Manual Handling considerations when handling, carrying and dispensing. Avoid contact with eyes. Do not eat, drink or smoke in areas where this product is used or stored. Ensure adequate ventilation of the working area. Do not contaminate water by cleaning of equipment or disposal of wastes. Use as appropriate: Protective clothing. Read the entire label and follow all use directions, restrictions, and precautions. |
|--|--|

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--|---|
| | Store in correctly labelled containers. Keep container tightly closed. Do not contaminate water, food, or feed by storage or disposal. Follow label instructions. |
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7.3. Specific end use(s)

See Section(s) 1.2 for further information.

SECTION 8: Exposure controls/personal protection

8.2. Exposure controls

| | |
|-----------------------------------|---|
| |  |
| Appropriate engineering controls | Ensure adequate ventilation of the working area. |
| Individual protection measures | Use as appropriate: Protective equipment. |
| Eye / face protection | Use as appropriate: Suitable eye protection. |
| Skin protection - Hand protection | Use as appropriate: Chemical-resistant gloves made of any waterproof material. |
| Skin protection - Other | Use as appropriate: Protective clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Occupational exposure controls | Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects. Protect clothing from contact with the product. Provide chemical shower. Provide eye wash station. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------|-------------------|
| State | Powder |
| Color | White |
| Odor | Characteristic |
| Odor threshold | Not applicable. |
| pH | 8.2 - 8.6 |
| Melting point | No data available |
| Freezing Point | No data available |
| Boiling point | No data available |
| Flash point | Not applicable. |
| Evaporation rate | No data available |
| Flammability limits | Not applicable. |
| Vapor pressure | Not applicable. |
| Vapor density | Not applicable. |
| Relative density | No data available |
| Fat Solubility | No data available |
| Partition coefficient | No data available |
| Autoignition temperature | Not applicable. |
| Viscosity | No data available |
| Explosive properties | Not applicable. |
| Oxidizing properties | Not applicable. |
| Solubility | Soluble in water |

9.2. Other information

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9.2. Other information

| | |
|---|-------------------|
| Conductivity | No data available |
| Surface tension | No data available |
| Gas group | Not applicable. |
| Benzene Content | No data available |
| Lead content | No data available |
| VOC (Volatile organic compounds) | No data available |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|--|---------------------------------|
| | Stable under normal conditions. |
|--|---------------------------------|

10.2. Chemical stability

| | |
|--|---------------------------------|
| | Stable under normal conditions. |
|--|---------------------------------|

10.3. Possibility of hazardous reactions

| | |
|--|---|
| | Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected. |
|--|---|

10.4. Conditions to avoid

| | |
|--|--|
| | Keep away from extreme temperatures, Moisture. |
|--|--|

10.5. Incompatible materials

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

10.6. Hazardous decomposition products

| | |
|--|----------------|
| | Carbon oxides. |
|--|----------------|

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|--|--|
| Acute toxicity | Based on available data, the classification criteria are not met. However, this product does contain substance(s) that are classified as hazardous. For more information, see Section 3. |
| Skin corrosion/irritation | May cause irritation to skin. |
| Serious eye damage/irritation | May cause irritation to eyes. |
| Respiratory or skin sensitization | May cause allergic reactions in susceptible people. |
| Germ cell mutagenicity | No mutagenic effects reported. |
| Carcinogenicity | Carcinogen category 1. Not found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs, Volumes 1-123. Not listed in the National Toxicology Program (NTP) 14th Report on Carcinogens. Not listed in the American Conference of Governmental Industrial Hygienists (ACGIH) Guide to Occupational Exposure Values. Not listed in the OSHA standard 1910.1003 Carcinogens. |
| Reproductive toxicity | No teratogenic effects reported. |
| STOT-single exposure | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| STOT-repeated exposure | May cause damage to human organs based on animal data. |
| Aspiration hazard | No Significant Hazard. |

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11.1. Information on toxicological effects

| | |
|--------------------------------|--|
| Repeated or prolonged exposure | Avoid prolonged or repeated exposure. Delayed appearance of the complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. |
|--------------------------------|--|

11.1.2. Mixtures

| | |
|--|---|
| | See Section(s) 3 for further information. |
|--|---|

11.1.3. Hazard Information

| | |
|--|---|
| | See Section(s) 2 and 3 for further information. |
|--|---|

11.1.4. Toxicological information

| | |
|--|-------------------|
| | No data available |
|--|-------------------|

11.1.5. Hazard Class

| | |
|--|--|
| | See Section(s) 2 and 14 for further information. |
|--|--|

11.1.6. Classification Criteria

| | |
|--|---|
| | Based on the Globally Harmonized System (GHS) considerations for the classification of mixtures. See Section 15 for regulatory citations. |
|--|---|

11.1.7. Information on likely routes of exposure

| | |
|--|---|
| | Inhalation. Ingestion. Eye contact. Skin contact. |
|--|---|

11.1.8. Symptoms related to the physical, chemical and toxicological characteristics

| | |
|--|---|
| | See Section(s) 4.2 for further information. |
|--|---|

11.1.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| | See Section(s) 4.2 for further information. |
|--|---|

11.1.10. Interactive effects

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

11.1.11. Absence of specific data

| | |
|--|--|
| | <1% of this mixture consists of ingredients of unknown acute toxicity. |
|--|--|

11.1.12. Mixture versus substance information

| | |
|--|---|
| | See Section(s) 3 for further information. |
|--|---|

11.1.13. Other information

| | |
|--|---|
| | Caution - substance not yet fully tested. |
|--|---|

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--|-------------------|
| | No data available |
|--|-------------------|

12.2. Persistence and degradability

| | |
|--|---------------------------------------|
| | No data is available on this product. |
|--|---------------------------------------|

12.3. Bioaccumulative potential

| | |
|--|---------------------------------------|
| | No data is available on this product. |
|--|---------------------------------------|

Partition coefficient

| | |
|--|---|
| | Tetrathionate Broth Base No data available |
|--|---|

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12.4. Mobility in soil

No data is available on this product.

12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

Caution - substance not yet fully tested.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of as special waste in compliance with local and national regulations. Follow label instructions.

Disposal methods

Do not contaminate water by cleaning of equipment or disposal of wastes. Do not flush into surface water. Dispose of in compliance with all local and national regulations.

Disposal of packaging

Nonrefillable container. Do not reuse or refill this container.
If empty: Do not reuse this container. Place in trash or offer for recycling, if available.
If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

| | |
|--|---|
| Regulations | Hazard Communication Standard: 29 Code of Federal Regulations 1910.1200: Occupational Safety and Health Standards: Z: Toxic and Hazardous Substances: Hazard Communication. |
| Chemical Inventories/Right-to-Know Lists: | --International-- Basel Convention (Hazardous Waste): H11. Chemical Weapons Convention (OPCW): This material contains no reportable components. |

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15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Kyoto Protocol Greenhouse Gases: This material contains no reportable components.
 Mercosur Agreement: Applicable.
 Montreal Protocol: This material contains no reportable components.
 The Rotterdam Convention: This material contains no reportable components.
 The Stockholm Convention: This material contains no reportable components.

--Asia and the ASEAN Nations--.

Catalog of Hazardous Chemicals (China): This material contains no reportable components.
 Regulation of Minister of Trade of the Republic of Indonesia, Number 75, Year 2014, regarding The Second Amendment of Minister of Trade, Number 44, Year 2009, Regarding Provision, Distribution, and Control of Hazardous Substances: This material contains no reportable components.
 Chemical Substances Control Law (Japan): This material contains no reportable components.
 Industrial Safety and Health Act, Dangerous Substances (Japan): This material contains no reportable components.
 Poisonous and Deleterious Substances Act (Japan): This material contains no reportable components.
 Chemical Substances Subject to Permission (Korea): This material contains no reportable components.
 Restricted or Prohibited Substances (Korea): This material contains no reportable components.
 Use and Standards of Exposure of Chemicals Hazardous to Health (USECHH), Regulation 2000 (Malaysia): This material contains no reportable components.
 Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients listed or exempt.
 Taiwan Toxic and Concerned Chemical Substances Control Act (TCCSCA): This material contains no reportable components.
 Hazardous Substances Act (Thailand): This material contains no reportable components.
 Law on Chemicals (Vietnam): This material contains no reportable components.

--Australia and New Zealand--.

Australian Dangerous Goods Code: Not applicable.
 Australian Inventory of Chemical Substances (AICS): All ingredients listed or exempt. IMAP-Tier i (human health). [Calcium carbonate, CAS No. 471-34-1], [Sodium thiosulfate, CAS No. 7772-98-7].
 New Zealand Inventory of Chemicals (NZIoC): All ingredients listed or exempt.

--European Union (EU) and the United Kingdom (UK)--.

Authorization List (Annex XIV of REACH): This material contains no reportable components.
 Annex XVII for REACH: This material contains no reportable components.
 Article 95 of the Biocidal Products Regulation (BPR): Not applicable.

--North America--.

Domestic/Non-Domestic Substances Lists (DSL/NDSL): All ingredients listed or exempt.
 Toxic Substances Control Act (TSCA): All ingredients listed or exempt.
 Massachusetts Right-to-Know Hazardous Substance List: This material contains no reportable components.
 New Jersey Worker and Community Right to Know Act: This material contains no reportable components.
 Pennsylvania Right to Know Law: This material contains no reportable components.
 Rhode Island Right-to-Know General Law: This material contains no reportable components.
 California Prop 65: This material contains no reportable components.

Inventories

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Inventories

| Ingredient | TSCA | MA | SARA313 | CALPROP65 | CWA307 | CAA112 | CWA311 | SARA302 | SARA304 |
|---|------|----|---------|-----------|--------|--------|--------|---------|---------|
| Sodium thiosulfate, anhydrous (Thiosulfuric acid (H ₂ S ₂ O ₃), disodium salt) | Y | N | N | N | N | N | N | N | N |

SECTION 16: Other information

Other information

| | |
|---|---|
| Revision | <p>This document differs from the previous version in the following areas:.</p> <ul style="list-style-type: none"> 1 - Description. 1 - Product Use. 1 - Manufactured By:. 2 - Other hazards. 2 - 2.1.2. Classification - GHS. 2 - Hazard pictograms. 2 - Signal Word. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Storage. 2 - Precautionary Statement: Disposal. 3 - Description. 4 - Ingestion. 5 - 5.2. Special hazards arising from the substance or mixture. 11 - Acute toxicity. 11 - Carcinogenicity. 11 - STOT-repeated exposure. 13 - 13.1. Waste treatment methods. 15 - Chemical Inventories/Right-to-Know Lists:. |
| Acronyms | <p>ADR/RID: European Agreements Concerning the International Carriage of Dangerous Goods by Rail (RID) and by Road (ADR).</p> <p>CAS No.: Chemical Abstracts Service.</p> <p>CLASS: Classification, Labeling, and Safety Data Sheet of Hazardous Chemicals Regulation 2013 (Malaysia).</p> <p>GHS: Globally Harmonized System.</p> <p>HCS 2012: Hazard Communication Standard (2012 revision).</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: International Civil Aviation Organization.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LD: Lethal dose.</p> <p>OEL: Occupational exposure limit.</p> <p>OSHA: U.S. Occupational Safety and Health Administration.</p> <p>PEL: Permissible Exposure Limit.</p> <p>REACH: Registration, Evaluation, Authorization, and Restriction of Chemicals.</p> <p>SVHC: Substance of very high concern.</p> <p>US DOT: United States Department of Transportation.</p> <p>VOC: Volatile Organic Compound.</p> <p>WEL: Workplace Exposure Limit.</p> |
| Text of Hazard Statements in Section 3 | <p>STOT SE 3: H335 - May cause respiratory irritation.</p> <p>Carc. 1A: H350 - May cause cancer .</p> <p>STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure .</p> <p>Skin Irrit. 2: H315 - Causes skin irritation.</p> <p>Eye Irrit. 2: H319 - Causes serious eye irritation.</p> |

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Further information

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