according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Sodium Thio

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Sodium Thio

Manufacturer/Supplier Article number: ST2775SS

Recommended uses of the product and restrictions on use: Laboratory chemicals

Manufacturer Details:

AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

Emergency telephone number:

ChemTel: (24-hour)

+1(800)255-3924 +1(813)248-0585 (International)

SECTION 2: Hazards identification

Classification of the substance or mixture:

Not classified for physical or heath hazards under GHS.

Signal word: None

Hazard statements: None

Precautionary statements:

None

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

| Ingredients: | | | |
|----------------|----------------------------------|---------------------------|--|
| CAS 1303-96-4 | Disodium tetraborate decahydrate | 0.05 % | |
| CAS 10102-17-7 | Sodium thiosulfate pentahydrate | 0.2 % | |
| CAS 7732-18-5 | water, Purified | 99.75 % | |
| | | Percentages are by weight | |

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact:

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Sodium Thio

Wash affected area with soap and water. Seek medical advice if discomfort or irritation persists. Flush skin with plenty of soap and water for at least 15 minutes.

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Immediately get medical assistance.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Shortness of breath. Irritation. Nausea. Headache.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Irritating and toxic gases may be generated by thermal decomposition and combustion.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Normal ventilation is adequate.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Refer to Section 8. Wear protective eyeware, gloves, and clothing. Always obey local regulations. Dispose of empty containers as unused product. Refer to Section 13. Small amounts may be flushed with excess water to sewer. Absorb with suitable material and treat as normal refuse.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with skin, eyes and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, well-ventilated area. Protect from freezing and physical damage.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Sodium Thio

SECTION 8: Exposure controls/personal protection





| Control parameters: | |
|-----------------------------------|---|
| Appropriate engineering controls: | Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Normal ventilation is adequate. |
| Respiratory protection: | Not required under normal conditions of use. |
| Protection of skin: | Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. |
| Eye protection: | Safety glasses with side shields or goggles. |
| General hygienic measures: | Wash hands before breaks and immediately after handling the product. Perform routine housekeeping to prevent dust generation. Before re- wearing, wash contaminated clothing. |

SECTION 9: Physical and chemical properties

| Appearance (physical state, color): | Clear, colorless liquid | Explosion limit lower: Explosion limit upper: | Non Explosive Non Explosive |
|-------------------------------------|-------------------------|--|--|
| Odor: | Odorless | Vapor pressure at 20°C: | Not determined |
| Odor threshold: | Not determined | Vapor density: | Approx. 1 |
| pH-value: | Not determined | Relative density: | Not determined |
| Melting/Freezing point: | Approx. 0°C | Solubilities: | Soluble in Water |
| Boiling point/Boiling range: | | Partition coefficient (n- octanol/water): | Not determined |
| Flash point (closed cup): | | Auto/Self-ignition temperature: | Not determined |
| Evaporation rate: | INIAT AATArminaa | Decomposition temperature: | Not determined |
| Flammability (solid, gaseous): | Not determined | Viscosity: | a. Kinematic: Not determined b. Dynamic: Not determined |
| Density at 20°C: | Not determined | | |

SECTION 10: Stability and reactivity

Reactivity:

None under normal processing.

Chemical stability:

Stable under normal conditions. Light sensitive.

Possible hazardous reactions:

Not Determined.

Conditions to avoid:

Incompatible Materials.

Incompatible materials:

Strong oxidizing agents. Strong reducing agents. Metal nitrates, lead, mercury, silver salts, acids, iodine,

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Sodium Thio

sodium nitrate.

Hazardous decomposition products:

Borane oxides. Boron oxides. Sodium oxides. Sulphur oxides.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Rabbit: 10,000 mg/kg 1303-96-4.

Chronic Toxicity: No additional information.
Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.
Carcinogenicity: No additional information.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure: No additional information. Additional toxicological information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity:

Fish LC50 - Carassius auratus (goldfish) - 178 mg/l - 72 h, 1303-96-4. Invertebrates EC50 - Daphnia magna (Water flea) - 1,085 - 1,402 mg/l - 48 h, 1303-96-4. Algae IC50 - Desmodesmus subspicatus (green algae) - 158 mg/l - 96 h, 1303-96-4.

Persistence and degradability:

Readily biodegradable.

Bioaccumulative potential:

Not expected to bio accumulate.

Mobility in soil: No additional information. Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Dilute with water and flush to sewer. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

SECTION 14: Transport information

US DOT

UN Number: ADR, ADN, DOT, IMDG, IATA

Not Dangerous Goods

Limited Quantity Exception:

None

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

| Sodium Thio | | |
|--------------------------------------|--------------------------------------|--|
| Bulk: | Non Bulk: | |
| RQ (if applicable): None | RQ (if applicable): None | |
| Proper shipping Name: Not Dangerous | Proper shipping Name: Not Dangerous | |
| Goods. | Goods. | |
| Hazard Class: None | Hazard Class: None | |
| Packing Group: Not Dangerous Goods. | Packing Group: Not Dangerous Goods. | |
| Marine Pollutant (if applicable): No | Marine Pollutant (if applicable): No | |
| additional information. | additional information. | |
| Comments: None | Comments: None | |

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL) :

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.06.2015

Sodium Thio

contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 1-0-0

HMIS: 1-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

- IMDG International Maritime Code for Dangerous Goods.
- PNEC. Predicted No-Effect Concentration (REACH).
- CFR Code of Federal Regulations (USA)
- SARA Superfund Amendments and Reauthorization Act (USA).
- RCRA. Resource Conservation and Recovery Act (USA).
- TSCA. Toxic Substances Control Act (USA).
- NPRI National Pollutant Release Inventory (Canada).
- DOT US Department of Transportation.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemicals.
- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstracts Service (division of the American Chemical Society).
- NFPA National Fire Protection Association (USA).
- HMIS Hazardous Materials Identification System (USA).
- WHMIS Workplace Hazardous Materials Information System (Canada).
- DNEL Derived No-Effect Level (REACH).