Safety Data Sheet · OSHA HCS 2024

Sodium Thiosulfate Technical Grade

Technical

Standard	Revised	Emergency
OSHA HCS 2024 · GHS Rev. 7	2026-11-12	Chemtel 1-800-255-3924 (24/7)

1 Identification

Product Identifier	Sodium Thiosulfate Technical Grade
Grade	Technical
CAS Number	10102-17-7
Chemical Formula	Na2S2O3 · 5H2O
Molecular Weight	248.18 g/mol
Manufacturer	Alliance Chemical 204 South Edmond Street, Taylor, TX 76574
Emergency Phone	Chemtel 1-800-255-3924 (24/7)
Recommended Use	Industrial / laboratory chemical. See Section 7.
Restrictions on Use	No restrictions identified beyond the conditions of safe use in Sections 7 and 8.

2 Hazard Identification

Signal Word	Not applicable
Hazard Statements	Not classified as hazardous under GHS based on available data.
Precautionary Statements	No specific GHS precautionary statements required.

3 Composition / Information on Ingredients

Component	CAS No.	Formula	Concentration
Sodium Thiosulfate Pentahydrate	10102-17-7	Na2S2O3·5H2O	99-100% w/w

Concentrations are nominal; lot-specific values appear on the Certificate of Analysis. Components not contributing to classification are omitted.

4 First-Aid Measures

Eyes	Rinse with water. Get medical attention if irritation develops or persists.
Skin	Wash with soap and water. Get medical attention if irritation develops.
Inhalation	Move to fresh air if discomfort occurs.
Ingestion	Rinse mouth with water. Get medical attention if you feel unwell.
Most Important Symptoms and Effects	No specific symptoms are expected from the hazards identified in Section 2.
Immediate Medical Attention and Special Treatment	Treat symptomatically. Get medical attention if symptoms develop or persist.

5 Fire-Fighting Measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
Specific Hazards Arising from the Chemical	Containers may rupture when heated.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Hazardous Combustion Products	Sulfur dioxide, hydrogen sulfide and sodium oxides on heating or contact with acids.

6 Accidental Release Measures

Personal Precautions	Wear safety glasses and gloves for cleanup. Avoid creating dust.
Environmental Precautions	Avoid releasing large quantities to drains or waterways.
Containment & Cleanup	Sweep or vacuum up, avoiding dust. Collect in a suitable container. Dispose of according to local regulations.

7 Handling and Storage

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.
Specific Storage Precautions	Keep containers tightly closed in a cool, dry, well-ventilated place away from direct sunlight and intense heat. The pentahydrate effloresces in dry air and deliquesces in moist air: protect from humidity swings. Store with other inorganic salts, away from acids and oxidizers.

8 Exposure Controls / Personal Protection

Occupational Exposure Limits

No established occupational exposure limits.

Engineering Controls	General ventilation is normally adequate.
Eye/Face Protection	Safety glasses are recommended.
Skin Protection	Gloves are recommended for prolonged or repeated contact.
Respiratory Protection	Not normally required.

9 Physical & Chemical Properties

Appearance	Large Translucent Crystals
Odor	Odorless
Odor Threshold	No data available
pH	6 – 8 (10% Solution)
Melting Point / Freezing Point	48.3 °C (118.9 °F)
Boiling Point	Not applicable (loses water of hydration at 100 °C)
Flash Point	Not applicable (non-flammable)

Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	Negligible at 20 °C
Vapor Density	No data available
Relative Density	1.69
Solubility	Very soluble in water; practically insoluble in alcohol
Partition Coefficient (n-octanol/water)	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	No data available
Form	Solid
Density	1.05 - 1.25 g/cm3

Values shown reflect product-specific canonical data. Lot-specific ranges may vary; see the Certificate of Analysis for the shipped lot.

10 Stability and Reactivity

Reactivity	Not reactive under normal conditions of use and storage.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Contact with acids and oxidizers; intense heat; humidity extremes.
Incompatible Materials	Strong acids (release sulfur dioxide); strong oxidizing agents; sodium nitrite and sodium nitrate (violent reaction); iodine and iodides; lead, silver and mercury salts.
Hazardous Decomposition Products	Sulfur dioxide, hydrogen sulfide and sodium oxides on heating or contact with acids.

11 Toxicological Information

See Section 2 for GHS hazard classification.

Likely Routes of Exposure	Inhalation, skin contact, eye contact, ingestion.
Symptoms	No specific symptoms are expected from the hazards identified in Section 2.
Delayed and Chronic Effects	No delayed or chronic effects identified beyond the classification in Section 2.
Numerical Measures of Toxicity	No data available

Carcinogen Classification

Agency	Status
IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.

Agency	Status
OSHA	Not listed as carcinogen.

12 Ecological Information

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence & Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available

13 Disposal Considerations

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14 Transport Information

Not regulated for transport under US DOT 49 CFR Subchapter C, IMDG, or IATA DGR.

15 Regulatory Information

Inventory / List	Status
California Proposition 65	Not listed
US EPA TSCA Active Inventory	Listed
EPCRA SARA 313 (TRI)	Not listed

SARA 311/312 hazard categories correspond to the GHS classification in Section 2. Data retrieved as of: California Proposition 65 2026-11-02; US EPA TSCA Active Inventory 2026-11-02; EPCRA SARA 313 (TRI) 2026-11-02.

16 Other Information

Revision Date	2026-11-12
Format	16-section format per OSHA HCS 2024 (29 CFR 1910.1200, Appendix D), aligned with GHS Rev. 7.

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