

SAFETY DATA SHEET

Creation Date 06-Aug-2009

Revision Date 14-Feb-2020

Revision Number 2

1. Identification

Product Name Sodium thiosulfate pentahydrate, ACS

Cat No. : 14518

CAS-No 10102-17-7
Synonyms Sodium Hyposulfite; Disodium Thiosulfate Pentahydrate.; Disodium Salt Pentahydrate

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.
Details of the supplier of the safety data sheet

Company

Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757
Email: tech@alfa.com
www.alfa.com

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.
After normal business hours, call Carechem 24 at (866) 928-0789.

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Combustible dust	Yes
------------------	-----

Label Elements

Signal Word

Warning

Hazard Statements

May form combustible dust concentrations in air

Precautionary Statements

Storage

Store in a well-ventilated place. Keep container tightly closed

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Sodium thiosulfate pentahydrate	10102-17-7	>95
Sodium thiosulfate	7772-98-7	-

4. First-aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.
Ingestion	Do NOT induce vomiting. Get medical attention.
Most important symptoms and effects	No information available.
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical

Dust can form an explosive mixture with air. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Sulfur oxides. Sodium oxides.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health
1

Flammability
1

Instability
1

Physical hazards
N/A

6. Accidental release measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust
-----------------------------	--

Environmental Precautions formation.
Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	6.0-8.4 10% aq. sol
Melting Point/Range	48.5 °C / 119.3 °F
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Soluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	> 45°C

Viscosity	Not applicable
Molecular Formula	Na ₂ O ₃ S ₂ . 5 H ₂ O
Molecular Weight	248.18

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Hygroscopic. Air sensitive. Light sensitive.
Conditions to Avoid	Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water. Exposure to light. Exposure to air.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Sulfur oxides, Sodium oxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Mist LC50 Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium thiosulfate	LD50 > 5000 mg/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

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

Irritation No information available

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium thiosulfate pentahydrate	10102-17-7	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium thiosulfate	7772-98-7	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and No information available

delayed

Endocrine Disruptor Information No information available**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

Do not empty into drains. Do not flush into surface water or sanitary sewer system.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium thiosulfate pentahydrate	Not listed	Pimephales promelas: LC50>10000mg/L/96h	Not listed	Not listed
Sodium thiosulfate	Not listed	LC50: = 24000 mg/L, 96h static (Gambusia affinis)	Not listed	Not listed

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.**Bioaccumulation/ Accumulation** No information available.**Mobility** . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Sodium thiosulfate	-4.35

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

United States of America Inventory

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Sodium thiosulfate pentahydrate	10102-17-7	-	-	-
Sodium thiosulfate	7772-98-7	X	ACTIVE	-

Legend:**TSCA** - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

TSCA 12(b) - Notices of Export Not applicable**International Inventories**

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
Sodium thiosulfate pentahydrate	10102-17-7	X	-	-	X	X	X	X	-

Sodium thiosulfate	7772-98-7	X	-	231-867-5	X	X	X	X	KE-31633
--------------------	-----------	---	---	-----------	---	---	---	---	----------

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable
U.S. Department of Transportation	
Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available
-----------------------	--------------------------

16. Other information

Prepared By	Health, Safety and Environmental Department Email: tech@alfa.com www.alfa.com
Creation Date	06-Aug-2009
Revision Date	14-Feb-2020
Print Date	14-Feb-2020
Revision Summary	SDS authoring systems update, replaces ChemGes SDS No. 10102-17-7/1.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS