

# SAFETY DATA SHEET

**Issue Date** 16-Sep-2021 **Revision Date** 26-Jan-2024 **Version** 4.6 **Page** 1 / 11

# 1. IDENTIFICATION

**Product identifier** 

Product Name Sodium Thiosulfate

Other means of identification

Product Code(s) 2293766

Safety data sheet number M00278

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory Use. Uses advised against Consumer use.

**Restrictions on use** For Laboratory Use Only.

## Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

#### Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

# 2. HAZARDS IDENTIFICATION

#### Classification

## **Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Hazards not otherwise classified (HNOC)

Not applicable

#### Label elements

# Signal word

None

#### **Hazard statements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

# Other Hazards Known

None

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance

**Chemical Name** Sodium Thiosulfate **Chemical Family** Reducing agent. **Formula** Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> 7772-98-7 **CAS No** 

10102-17-7 - Pentahydrate **Alternate CAS Number Chemical nature** Inorganic Compound.

## 4. FIRST AID MEASURES

Description of first aid measures

General advice No hazards which require special first aid measures. Use first aid treatment according to the

nature of the injury.

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

See Section 11 for additional Toxicological Information. **Symptoms** 

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

Use extinguishing measures that are appropriate to local circumstances and the Suitable Extinguishing Media

surrounding environment.

Caution: Use of water spray when fighting fire may be inefficient. **Unsuitable Extinguishing Media** 

Specific hazards arising from the

chemical

No information available.

Sulfur oxides. Sodium oxides. Carbon oxides. **Hazardous combustion products** 

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

# 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice** Only persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

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Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

# 7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

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

Flammability class Not applicable

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hand Protection** Wear suitable gloves.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection**No special protective equipment required.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

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None under normal processing.

Thermal hazards

# 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state Solid

AppearancecrystallineColorcolorlessOdorOdorlessOdor thresholdNot applicable

Property Values Remarks • Method

Molecular weight 158.13 g/mole

**pH** 6.5 - 8 5% Solution

Melting point / freezing point 52 °C / 125.6 °F

Initial boiling point and boiling range No data available

Evaporation rateNot applicableVapor pressureNot applicable

Relative vapor density

No data available

Specific gravity - VALUE 1 1.74

Partition coefficient No data available

**Soil Organic Carbon-Water Partition** 

Coefficient

No data available

Autoignition temperature No data available

**Decomposition temperature**No data available

Dynamic viscosity Not applicable

Kinematic viscosity Not applicable

#### Solubility(ies)

# Water solubility

Water solubility classification	Water solubility_	Water Solubility Temperature	
Completely soluble	701000 mg/L	20 °C / 68 °F	

### Solubility in other solvents

Chemical Name Solubility classification			Solubility	Solubility Temperature
	None reported	No information available	No data available	No information available

#### Other information

#### **Metal Corrosivity**

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

# **Volatile Organic Compounds (VOC) Content**

This Product is by Weight 100% an Individual Pure Chemical Substance

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**Explosive properties** 

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

Flash point Not applicable

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

No data available

# **10. STABILITY AND REACTIVITY**

### Reactivity

Not applicable.

#### Chemical stability

Stable under normal conditions.

#### **Explosion data**

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

# Possibility of hazardous reactions

None under normal processing.

## **Hazardous polymerization**

Hazardous polymerization does not occur.

# Conditions to avoid

None known based on information supplied.

# Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

# Hazardous decomposition products

Toxic fumes of sulfur oxides. Sodium oxides. Carbon oxides.

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

#### **Product Information**

**Inhalation** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

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**Symptoms** 

No information available.

## **Acute toxicity**

Based on available data, the classification criteria are not met

#### Mixture

If available, see ingredient data below.

#### **Ingredient Acute Toxicity Data**

No data available.

#### **Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

### **Acute Toxicity Estimations (ATE)**

Not applicable

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

#### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

#### **Mixture**

If available, see ingredient data below.

### Ingredient Skin Corrosion/Irritation Data

No data available.

# Serious eye damage/irritation

Based on available data, the classification criteria are not met.

#### Mixture

If available, see ingredient data below.

# Ingredient Eye Damage/Eye Irritation Data

No data available.

#### Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

#### **Mixture**

If available, see ingredient data below.

### **Ingredient Sensitization Data**

No data available.

#### STOT - single exposure

Based on available data, the classification criteria are not met.

#### **Mixture**

If available, see ingredient data below.

### Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

## STOT - repeated exposure

Based on available data, the classification criteria are not met.

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#### **Mixture**

If available, see ingredient data below.

# Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

#### Carcinogenicity

Based on available data, the classification criteria are not met.

#### Mixture

If available, see ingredient data below.

# **Ingredient Carcinogenicity Data**

No data available.

## Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA	Does not apply

#### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

#### Mixture invitro Data

If available, see ingredient data below.

### Substance invitro Data

No data available.

# Mixture invivo Data

If available, see ingredient data below.

## Substance invivo Data

No data available.

## Reproductive toxicity

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## **Ingredient Reproductive Toxicity Data**

No data available.

# **Aspiration hazard**

Based on available data, the classification criteria are not met.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

### **Mixture**

# **Aquatic Acute Toxicity**

If available, see ingredient data below.

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**Aquatic Chronic Toxicity** 

If available, see ingredient data below.

**Substance** 

**Aquatic Acute Toxicity** 

Test data reported below.

**Aquatic Chronic Toxicity** 

No data available.

Persistence and degradability

**Mixture** 

No data available.

**Mixture** 

No data available.

Partition coefficient No data available

**Mobility** 

Soil Organic Carbon-Water Partition Coefficient No data available

Other adverse effects
No information available

# 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

US EPA Waste Number Not applicable

Special instructions for disposal Check with local municipal and state authorities and waste contractors for pertinent local

information regarding the proper disposal of chemicals.

# 14. TRANSPORT INFORMATION

**DOT** Not regulated

TDG Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

**Note:** No special precautions necessary.

#### Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

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If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

# 15. REGULATORY INFORMATION

**National Inventories** 

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

#### International Inventories

**EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC** Complies **KECL** Complies **PICCS TCSI** Complies **AICS** Complies Complies **NZIoC** 

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

**AICS** - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

# **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

# SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

# **US State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals

IMERC: Not applicable

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## **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations.

#### **U.S. EPA Label Information**

# 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

## **Special Comments**

None

#### Additional information

## Global Automotive Declarable Substance List (GADSL)

Not applicable

### NFPA and HMIS Classifications

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical
				properties -
HMIS	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection -
		-	-	X
				- 1

#### Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH (American Conference of Governmental Industrial Hygienists)

ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

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# Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN\* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization \*\* Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

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Revision Note None

**Disclaimer** 

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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**End of Safety Data Sheet** 

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