# Chemical Safety Data Sheet MSDS / SDS

# Sodium thiosulphate SDS

Revision Date: 2024-04-25 Revision Number: 1

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

#### Product identifier

Product name: Sodium thiosulphate

CAS: 7772-98-7

# Relevant identified uses of the substance or mixture and uses advised against

Relevant identified For R&D use only. Not for medicinal, household or other use.

uses:

Uses advised none

against:

# Company Identification

Company: Chemicalbook.in

Address: 5 vasavi Layout Basaveswara Nilayam Pragathi Nagar Hyderabad, India -500090

Telephone: +91 9550333722

# **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

Not classified.

# GHS label elements, including precautionary statements Signal word No signal word Hazard statement(s) none Precautionary statement(s) Prevention none Response none Storage none Disposal none Other hazards which do not result in classification

no data available

# **SECTION 3: Composition/information on ingredients**

### Substance

Chemical name: Sodium thiosulphate Common names and Sodium thiosulphate

synonyms:

CAS number: 7772-98-7 EC number: 231-867-5

100% Concentration:

# **SECTION 4: First aid measures**

### Description of necessary first-aid measures

#### If inhaled

Fresh air, rest.

# Following skin contact

Rinse and then wash skin with water and soap.

# Following eye contact

Rinse with plenty of water for several minutes (remove contact lenses if easily possible).

# Following ingestion

Rinse mouth.

### Most important symptoms/effects, acute and delayed

no data available

# Indication of immediate medical attention and special treatment needed, if necessary

no data available

# **SECTION 5: Firefighting measures**

# Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

# Specific hazards arising from the chemical

Not combustible. Gives off irritating or toxic fumes (or gases) in a fire. Risk of explosion on contact with oxidizing agents.

# Special protective actions for fire-fighters

In case of fire in the surroundings, use appropriate extinguishing media.

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airbome concentration of the substance. Sweep spilled substance into covered containers.

### Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# **SECTION 7: Handling and storage**

### Precautions for safe handling

NO contact with oxidizing agents. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

# Conditions for safe storage, including any incompatibilities

Separated from strong oxidants.

# SECTION 8: Exposure controls/personal protection

# Control parameters

# Occupational Exposure limit values

no data available

#### Biological limit values

no data available

# Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

# Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Wear safety goggles.

# Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

# Respiratory protection

Avoid inhalation of dust.

#### Thermal hazards

no data available

# SECTION 9: Physical and chemical properties and safety characteristics

Physical state: Solid. Crystalline.

Colour: Colourless.

Odour: no data available

Melting Remarks: The test item decomposes during the measurement up to 500°C.

point/freezing

point:

Boiling point or 99°C/12.8mmHg

initial boiling point and boiling range:

Flammability: no data available

Lower and upper

explosion

no data available

limit/flammability

limit:

Flash point: 17°C(lit.)

Auto-ignition temperature:

no data available

Decomposition

no data available

temperature:

pH: no data available
Kinematic no data available

viscosity:

Solubility: In water: 764 000 mg/L. Temperature: 25 °C.

Partition -4.35 (calculated)

coefficient noctanol/water:

Vapour pressure: no data available

Density and/or 1.69. Temperature:20 °C.

relative density:

Relative vapour

density:

no data available

Particle no data available

characteristics:

# **SECTION 10: Stability and reactivity**

# Reactivity

no data available

# Chemical stability

no data available

# Possibility of hazardous reactions

Decomposes on heating. This produces toxic fumes including sulfur oxides. Reacts violently with strong oxidants.

#### Conditions to avoid

no data available

# Incompatible materials

no data available

# Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

# Acute toxicity

Oral: LD50 - rat (male/female) -  $> 5\,000\,\text{mg/kg}$  bw. Remarks: The stated LD50 is based on the aqueous solution. The LD50 of the pure test substance was greater than 2500 mg/kg (was calculated from 49 % solution).

Inhalation: LC50 - rat (male) - > 2.6 mg/L air (analytical).

Dermal: LD50 - rabbit (male) - > 2000 mg/kg bw.

#### Skin corrosion/irritation

no data available

# Serious eye damage/irritation

no data available

# Respiratory or skin sensitization

no data available

# Germ cell mutagenicity

no data available

# Carcinogenicity

no data available

# Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

# Aspiration hazard

A nuisance-causing concentration of airborne particles can be reached quickly when dispersed.

# **SECTION 12: Ecological information**

# **Toxicity**

Toxicity to fish: LC50 - Lepomis macrochirus - 510 - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - 230 mg/L - 48 h.

Toxicity to algae: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricomutum) - > 100 mg/L - 72 h.

Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - > 1 000 mg/L - 3 h. Remarks: Respiration rate.

# Persistence and degradability

no data available

# Bioaccumulative potential

no data available

# Mobility in soil

no data available

#### Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

# Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: Transport information**

#### **UN Number**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

# **UN Proper Shipping Name**

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

# Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

### Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.) IMDG: Not dangerous goods. (For reference only, please check.) IATA: Not dangerous goods. (For reference only, please check.)

#### Environmental hazards

ADR/RID: No IMDG: No IATA: No

### Special precautions for user

no data available

# Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS)

Listed.

# **EC Inventory**

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Listed.

# China Catalog of Hazardous chemicals 2015

Not Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

(PICCS)

Listed.

Vietnam National Chemical Inventory

Listed.

IECSC)

Listed.

Korea Existing Chemicals List (KECL)

Listed.

### **SECTION 16: Other information**

# Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

#### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website:

http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

ECHA - European Chemicals Agency, website: https://echa.europa.eu/

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any