

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

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

· 1.1 Product identifier



· **Trade name:** SODIUM THIOSULPHATE

· **CAS Number:**

7772-98-7

· **EC number:**

231-867-5

· **Registration number** 01-2119531537-38

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Textile/Leather industry; Water treatment/Mining/Offshore/Metal industry/Surface treatment); Additive for cement; pharmaceuticals; Photographic processing; laundry products; dishwashing products.

· **Product category**

PC1 Adhesives, sealants

PC2 Adsorbents

PC3 Air care products

PC4 Anti-Freeze and de-icing products

PC7 Base metals and alloys

PC8 Biocidal products

PC9a Coatings and paints, thinners, paint removers

PC9b Fillers, putties, plasters, modelling clay

PC13 Fuels

PC14 Metal surface treatment products

PC15 Non-metal-surface treatment products

PC17 Hydraulic fluids

PC18 Ink and toners

PC19 Intermediate

PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents

PC21 Laboratory chemicals

PC23 Leather treatment products

PC24 Lubricants, greases, release products

PC25 Metal working fluids

PC26 Paper and board treatment products

PC28 Perfumes, fragrances

PC29 Pharmaceuticals

PC30 Photo-chemicals

PC31 Polishes and wax blends

PC32 Polymer preparations and compounds

PC34 Textile dyes, and impregnating products

PC35 Washing and cleaning products (including solvent based products)

PC37 Water treatment chemicals

PC38 Welding and soldering products, flux products

PC39 Cosmetics, personal care products

PC40 Extraction agents

PC 0: Other: enzyme stabilizer

· **Application of the substance / the mixture**

The product has many industrial, professional and consumer applications.

· **Uses advised against**

Processes involving the use of incompatible substances - refer to section 10.

Processes involving extreme heat use advised against.

The product is intended exclusively for industrial and professional use.

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Intra-Laboratories Ltd

Unit 8 Devonshire Meadows

Plymouth

Devon

PL6 7EZ

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 1)

UK
Tel: 01752 724109
e-mail: admin@intralabs.co.uk

- **Further information obtainable from:** Product safety department.
- **1.4 Emergency telephone number:** Tel: 01752 724109

SECTION 2: Hazards identification

- **Classification according to Regulation (EC) No 1272/2008**
The substance is not classified, according to the CLP regulation.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008** Void
 - **Hazard pictograms** Void
 - **Signal word** Void
 - **Hazard statements** Void
- **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
 - **CAS No. Description**
7772-98-7 Sodium thiosulphate
 - **Identification number(s)**
 - **EC number:** 231-867-5
 - **Additional information:**
CAS 7772-98-7: anhydrous
CAS: 10102-17-7 pentahydrate

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
 - **General information:** No special measures required.
 - **After inhalation:** Supply fresh air; consult doctor in case of complaints.
 - **After skin contact:**
Immediately rinse with water.
If skin irritation continues, consult a doctor.
 - **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. Then consult a doctor.
 - **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Call a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 2)

- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
Do not inhale explosion gases or combustion gases.
- **Additional information**
Cool endangered receptacles with water spray.
Freely soluble in water.
Hygroscopic.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Avoid formation of dust.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course in the undiluted form.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
- **6.4 Reference to other sections** No dangerous substances are released.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Prevent formation of dust.
Ensure good ventilation/exhaustion at the workplace.
Ensure high housekeeping standards to remove build of dust.
- **Information about fire - and explosion protection:** Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store in a cool location.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from humidity and water.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 3)

- **DNELs**

- WORKERS

- Long-term exposure - systemic effects

- Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 374 mg/m³

- GENERAL POPULATION

- Long-term exposure - systemic effects

- Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 110 mg/m³

- Oral DN(M)EL

- DNEL (Derived No Effect Level): 14 mg/kg bw/day

- **PNECs**

- PNEC aqua (freshwater): 0.8 mg/L

- PNEC aqua (marine water): 0.08 mg/L

- PNEC STP: 102.6 mg/L

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

- Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.

- Avoid close or long term contact with the skin.

- Do not eat, drink, smoke or sniff while working.

- Do not breath dust

- **Respiratory protection:**

- Use suitable respiratory protective device in case of insufficient ventilation.

- Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

- If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

- **Protection of hands:**

- The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

- The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

- The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

- **Body protection:**

- Protective work clothing

- Body protection must be chosen depending on product properties, activity and possible exposure.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Solid

- **Colour:** White

- **Odour:** Odourless

- **pH-value (50 g/l) at 20 °C:** 6 - 8.5

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 4)

· Change in condition	
Melting point/freezing point:	100 (decomp.) °C
Initial boiling point and boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Explosive properties:	Product does not present an explosion hazard.
· Density at 20 °C:	1.69 g/cm ³
· Solubility in / Miscibility with water at 20 °C:	>10,000 g/l
· Partition coefficient: n-octanol/water:	-4.35 log POW
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**
The reaction with oxidizing agents (e.g., halogens, nitrates, nitrites, oxides) can be vigorous and exothermic.
Sulphur dioxide is produced when reacted with acids.
Decomposes when heated; products include hydrogen sulphide, sulphur dioxide, sulphur trioxide.
Explodes violently if mixed with powdered sodium nitrite and heated.
The substance can react dangerously with fluorine.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Substances specifically listed in section 10.3 as incompatible.
Strong acids and oxidising agents
Strong bases.
Sodium nitrite
- **10.6 Hazardous decomposition products:**
Hydrogen sulphide
Sulphur oxides (SO_x)
- **Additional information:**
Non-combustible solid.
Freely soluble in water.
Hygroscopic.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:		
7772-98-7 Sodium thiosulphate		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>2.6 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 5)

- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
 INHALATION RISK: A nuisance-causing concentration of airborne particles can be reached quickly when dispersed
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

7772-98-7 Sodium thiosulphate	
EC50	230 mg/kg (daphnia)

· 12.2 Persistence and degradability

Since thiosulphates are inorganic substances, they will not undergo biodegradation. Instead, being reducing agents, they will be subject to oxidation processes mediated by microorganisms, or will be transformed by disproportionation to other sulphur substances (e.g., sulphites and sulphates).

· 12.3 Bioaccumulative potential

Product is not expected to bioaccumulate.

· 12.4 Mobility in soil

No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· 12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· European waste catalogue

Waste key numbers in accordance with the European Waste Catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

· Uncleaned packaging:

· Recommendation:

Container remains hazardous when empty. Continue to observe all precautions.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 6)

Containers, even those that are "empty," may contain residues that can develop hazardous gases and vapors upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Disposal must be made according to official regulations.

- **Recommended cleansing agents:** Water, if necessary, together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Annex: Exposure scenario

- **Sector of Use SU5** Manufacture of textiles, leather, fur

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 7)

- **Product category**

- PC1 Adhesives, sealants
- PC2 Adsorbents
- PC3 Air care products
- PC4 Anti-Freeze and de-icing products
- PC7 Base metals and alloys
- PC8 Biocidal products
- PC9a Coatings and paints, thinners, paint removers
- PC9b Fillers, putties, plasters, modelling clay
- PC13 Fuels
- PC14 Metal surface treatment products
- PC15 Non-metal-surface treatment products
- PC17 Hydraulic fluids
- PC18 Ink and toners
- PC19 Intermediate
- PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
- PC21 Laboratory chemicals
- PC23 Leather treatment products
- PC24 Lubricants, greases, release products
- PC25 Metal working fluids
- PC26 Paper and board treatment products
- PC28 Perfumes, fragrances
- PC29 Pharmaceuticals
- PC30 Photo-chemicals
- PC31 Polishes and wax blends
- PC32 Polymer preparations and compounds
- PC34 Textile dyes, and impregnating products
- PC35 Washing and cleaning products (including solvent based products)
- PC37 Water treatment chemicals
- PC38 Welding and soldering products, flux products
- PC39 Cosmetics, personal care products
- PC40 Extraction agents
- PC 0: Other: enzyme stabilizer

- **Description of the activities / processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

- **Conditions of use**

- **Duration and frequency** 5 workdays/week.

- **Physical parameters**

- **Physical state** Solid

- **Concentration of the substance in the mixture** Raw material.

- **Used amount per time or activity** According to directions for use.

- **Other operational conditions**

- **Other operational conditions affecting environmental exposure**

Observe section 6 of the Safety Data Sheet (Accidental release measures).

- **Other operational conditions affecting consumer exposure** Keep out of the reach of children.

- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

- **Risk management measures**

- **Worker protection**

- **Organisational protective measures**

Deploy only trained chemical workers.

Provide Internal Plant Instruction.

Employment restrictions concerning juveniles must be observed.

Keep away from food, beverages and animal feed.

Provide washing facilities in the workplace.

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

Make sure that the workplace is well-lit and organised.

Handling procedures must be well documented.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.06.2020

Revision: 29.06.2020

Trade name: SODIUM THIOSULPHATE

(Contd. of page 8)

· Technical protective measures

- Store in cool, dry place in tightly closed receptacles.
- Keep away from heat and direct sunlight.
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of dust.
- Any unavoidable deposit of dust must be regularly removed.
- Use only in well ventilated areas.
- Washing facilities / Water for cleaning eyes and skin should be available.

· Personal protective measures

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid close or long term contact with the skin.
- Avoid contact with the eyes.
- Do not eat or drink while working.
- Ensure that washing facilities are available at the work place.
- Storing food in the working area is prohibited.
- Use suitable respiratory protective device in case of insufficient ventilation.

· Measures for consumer protection Keep locked up and out of the reach of children.**· Environmental protection measures**

- Air** No special measures required.
- Water** No special measures required.
- Soil** Prevent contamination of soil.

· Disposal measures

- Ensure that waste is collected and contained.
- Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- Must not be disposed of with household waste. Do not allow to reach sewage system.

· Disposal procedures

- Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Containers, even those that are "empty," may contain residues that can develop hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

· Waste type Partially emptied and uncleaned packaging**· Exposure estimation**

- Consumer** Not relevant for this Exposure Scenario.
- Guidance for downstream users** No further relevant information available.

GB