



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

1.1 Product identifier

Ammonium Thiosulfate

MSDS No: SV209800
 CAS Number:
 7783-18-8
 EC number:
 231-982-0
 Registration number 01-2119537325-41

1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance / the mixture

Fixing agent for X-ray films
 Agricultural chemicals
 Reducing agent/ Deoxidiser

1.3 Details of the supplier of the safety data sheet

Supplier:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

7783-18-8 ammonium thiosulphate

Identification number(s)

EC number: 231-982-0

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.



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After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing:
 Rinse out mouth and then drink plenty of water.
 If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Nitrogen oxides (NO_x)

Sulphur dioxide (SO₂)

Ammonia

5.3 Advice for firefighters

Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

6.1 **Personal precautions, protective equipment and emergency procedures** Avoid formation of dust.

6.2 **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

6.3 **Methods and material for containment and cleaning up:** Pick up mechanically.

6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special precautions are necessary if used correctly.

Any unavoidable deposit of dust must be regularly removed.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility:

Do not store together with acids.

Store away from foodstuffs.

Further information about storage conditions:

Store in dry conditions.

Keep container tightly sealed.

Storage class: 13

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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:

DNELs

7783-18-8 ammonium thiosulphate

Inhalative DNEL 104 mg/m³ (hum)

PNECs

7783-18-8 ammonium thiosulphate

PNEC aqua - freshwater 0.78 mg/L (freshwater)

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: In the case of generation of fine dust use of dust filter

Protection of hands:

Preventive skin protection by use of skin-protecting agents is recommended.

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

Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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: Not required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Crystalline
Colour:	White
Odour:	Recognisable
Odour threshold:	Not determined.

pH-value (200 g/l) at 25 °C: 6.3 - 7.0

Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Product is not flammable.

Decomposition temperature: 150 °C

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

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Explosion limits:

Lower: Not determined.
 Upper: Not determined.

Vapour pressure:

Not applicable.

Density at 20 °C:1.679 g/cm³

Bulk density at 20 °C:

820 kg/m³

Relative density

Not determined.

Vapour density

Not applicable.

Evaporation rate

Not applicable.

Solubility in / Miscibility with

water at 100 °C: 1033 g/l

Partition coefficient: n-octanol/water: Not determined.**Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

9.2 Other information

No further relevant information available.

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 according to specifications.

Can decompose slowly with localised heating above 150 °C.

10.3 Possibility of hazardous reactions

Contact with acids releases toxic gases.

Reacts with alkalis releasing ammonia.

10.4 Conditions to avoid No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:**

Sulphur dioxide

Ammonia

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:

7783-18-8 ammonium thiosulphate

Oral LD50 2890 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rabbit)

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

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.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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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:

7783-18-8 ammonium thiosulphate

LC50/96 h 770 mg / L (freshwater)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

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 Subsequent information refers to the deliver goods not to used goods.

European waste catalogue

06 03 14 solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

Uncleaned packaging:

Recommendation: 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

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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.
UN "Model Regulation": Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void

Signal word Void

Hazard statements Void

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

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.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

* Data compared to the previous version altered.