



# Sodium Sulfate Anhydrous

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
Substance name : Sodium Sulfate Anhydrous  
CAS-No. : 7757-82-6  
Formula : Na<sub>2</sub>SO<sub>4</sub>

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Pharmaceuticals  
Laboratory Reagent

#### 1.3. Supplier

##### Manufacturer

Jost Chemical Co.  
8150 Lackland Rd.  
Saint Louis, Missouri 63114  
T 314-428-4300 - F 314-428-4366  
[sds@jostchemical.com](mailto:sds@jostchemical.com) - [www.jostchemical.com](http://www.jostchemical.com)

#### 1.4. Emergency telephone number

Emergency number : For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC Day or Night  
United States and Canada: 1-800-424-9300 / +1 703-527-3887  
Global: +1 703-741-5970

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS-US labeling

No labeling applicable

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS-US classification
Sodium Sulfate Anhydrous (Main constituent)	(CAS-No.) 7757-82-6	100	Not classified

Full text of hazard classes and H-statements: see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice. IF exposed or concerned: Get medical advice/attention.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.  
First-aid measures after skin contact : Rinse with water. Soap may be used. Take victim to a doctor if irritation persists. Wash skin with plenty of water.

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- First-aid measures after eye contact : Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison Information Centre ([www.big.be/antigif.htm](http://www.big.be/antigif.htm)). Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

- Potential Adverse human health effects and symptoms : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Slightly harmful in contact with skin. Not irritant to skin. Slightly harmful by inhalation. Slightly irritant to eyes.
- Symptoms/effects after inhalation : AFTER INHALATION OF DUST: Slight irritation.
- Symptoms/effects after skin contact : Unlikely to cause harmful effects.
- Symptoms/effects after eye contact : Slight irritation.
- Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Abdominal pain. Diarrhoea. Change in the hemogramme/blood composition.
- Chronic symptoms : No effects known.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Adapt extinguishing media to the environment for surrounding fires. Water spray. Dry powder. Foam.

### 5.2. Specific hazards arising from the chemical

- Fire hazard : DIRECT FIRE HAZARD: Non combustible.
- Explosion hazard : Not applicable.
- Reactivity : Reacts with (strong) acids: release of toxic/combustible gases/vapors (hydrogen sulphide). Reacts violently with (some) metals. Reacts with (strong) bases.

### 5.3. Special protective equipment and precautions for fire-fighters

- Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighborhood close doors and windows.
- Firefighting instructions : Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.
- Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

- Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit.
- Emergency procedures : Ventilate spillage area. Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation. Do not breathe dust/fume/gas/mist/vapors/spray.
- Measures in case of dust release : In case of dust production: keep upwind. Dust production: have neighborhood close doors and windows.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- For containment : Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Hazardous reaction: measure explosive gas-air mixture. If reacting: dilute combustible/toxic gases/vapors. Take account of toxic/corrosive precipitation water.

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Methods for cleaning up : Mechanically recover the product. Stop dust cloud by humidifying. Scoop solid spill into closing containers. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid raising dust. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures : Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

Storage conditions : Store in a clean, dry warehouse in the original unopened containers. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials : Strong acids. Reactive metals (Al, K, Zn ...).

Storage temperature : < 30 °C

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: (strong) acids. (strong) bases. water/moisture.

Storage area : Store in a dry area. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. watertight. dry. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : SUITABLE MATERIAL: paper. cardboard. plastics. MATERIAL TO AVOID: aluminum.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Sodium Sulfate Anhydrous (7757-82-6)		
DNEL	DNEL	20 mg/m <sup>3</sup> (Long-term effects, workers)
PNEC	PNEC	11.09 mg/l (aqua, freshwater)

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Dust/aerosol mask with filter type P1. Gloves. Safety glasses.

#### Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber. PVC

#### Hand protection:

Gloves

#### Eye protection:

Safety glasses. In case of dust production: protective goggles. Safety glasses

#### Skin and body protection:

Protective clothing

#### Respiratory protection:

Dust production: dust mask with filter type P1

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### Personal protective equipment symbol(s):



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder. Crystals.
Color	: White
Odor	: Odorless
Odor threshold	: No data available
pH	: 8 (10 %)
Melting point	: 884 °C
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: Not applicable
Relative density	: 2.7 (20 °C)
Specific gravity / density	: 2680 kg/m <sup>3</sup>
Molecular mass	: 142.04 g/mol
Solubility	: Soluble in water. Soluble in glycerol. Water: 44.45 g/100ml (20 °C)
Log Pow	: -4.38 (Calculated, US EPA)
Auto-ignition temperature	: Not applicable
Decomposition temperature	: > 884 °C
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

SADT	: Not applicable
VOC content	: Not applicable (inorganic)
Other properties	: Hygroscopic.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with (strong) acids: release of toxic/combustible gases/vapors (hydrogen sulphide). Reacts violently with (some) metals. Reacts with (strong) bases.

### 10.2. Chemical stability

Hygroscopic.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Thermal decomposition generates : Sulphur oxides.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Sodium Sulfate Anhydrous (7757-82-6)

LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value)
LC50 inhalation rat (mg/l)	> 2.4 mg/l air (OECD 436: Acute inhalation toxicity-acute toxic class method, 4 h, Rat, Male/female, Experimental value)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
pH: 8 (10 %)  
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)  
pH: 8 (10 %)  
Respiratory or skin sensitization : Not classified (Based on available data, the classification criteria are not met)  
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)  
Carcinogenicity : Not classified (Lack of data)  
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)  
Specific target organ toxicity – single exposure : Not classified (Based on available data, the classification criteria are not met)

#### Sodium Sulfate Anhydrous (7757-82-6)

NOAEL (oral, rat)	160 mg/kg body weight (OECD 414 method)
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Specific target organ toxicity – repeated exposure : Not classified (Based on available data, the classification criteria are not met)  
Aspiration hazard : Not classified  
(Based on available data, the classification criteria are not met)  
Viscosity, kinematic : No data available  
Likely routes of exposure : Skin and eye contact.  
Potential Adverse human health effects and symptoms : Non-toxic if swallowed (LD50 oral, rat > 5000 mg/kg). Slightly harmful in contact with skin. Not irritant to skin. Slightly harmful by inhalation. Slightly irritant to eyes.  
Symptoms/effects after inhalation : AFTER INHALATION OF DUST: Slight irritation.  
Symptoms/effects after skin contact : Unlikely to cause harmful effects.  
Symptoms/effects after eye contact : Slight irritation.  
Symptoms/effects after ingestion : AFTER INGESTION OF HIGH QUANTITIES: Abdominal pain. Diarrhoea. Change in the hemogramme/blood composition.  
Chronic symptoms : No effects known.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.  
Ecology - air : Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).  
Ecology - water : Not harmful to crustacea. Not harmful to fishes. Groundwater pollutant. Not harmful to activated sludge. Not harmful to bacteria.

#### Sodium Sulfate Anhydrous (7757-82-6)

LC50 fish 1	7960 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value)
LOEC (chronic)	> 100 mg/l (7 days; Ceriodaphnia dubia)

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### 12.2. Persistence and degradability

Sodium Sulfate Anhydrous (7757-82-6)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable (inorganic)
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

### 12.3. Bioaccumulative potential

Sodium Sulfate Anhydrous (7757-82-6)	
BCF other aquatic organisms 1	0.5 (Other, Calculated value)
Log Pow	-4.38 (Calculated, US EPA)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

Sodium Sulfate Anhydrous (7757-82-6)	
Surface tension	0.071 N/m (20 °C, 1.005 g/l)
Ecology - soil	No (test)data on mobility of the substance available.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional legislation (waste)	: LWCA (the Netherlands): KGA category 05.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Remove waste in accordance with local and/or national regulations. Recycle/reuse. Remove to an authorized dump (Class I). Precipitate/make insoluble.
Additional information	: Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Not regulated

### Transportation of Dangerous Goods

Proper Shipping Name (Transportation of Dangerous Goods) : Not regulated for transport

### Transport by sea

Proper Shipping Name (IMDG) : Not regulated for transport

### Air transport

Proper Shipping Name (IATA) : Not regulated for transport

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Sodium Sulfate Anhydrous (7757-82-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

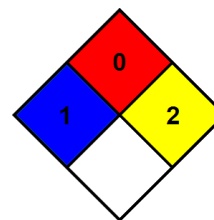
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NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



#### Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

SDS US (HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*