We create chemistry

Safety Data Sheet
Sodium Sulfite anhydrous food grade (E221)

1. Identification

Product identifier used on the label

Sodium Sulfite anhydrous food grade (E221)

Recommended use of the chemical and restriction on use

Recommended use*: food additive(s)
Recommended use*: food additive(s); inorganic reducing agents
Unsuitable for use: Not intended for sale to or use by the general public.

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Molecular formula:	Na(2)SO(3)
Chemical family:	sodium salt, inorganic reducing agents
Synonyms:	Sodium Sulfite Anhydrous Use: chemical; food additive(s)

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Aquatic Acute	3	Hazardous to the aquatic environment - acute

Label elements

Hazard Statement:
H402 Harmful to aquatic life.

Precautionary Statements (Prevention):
P273 Avoid release to the environment.

Precautionary Statements (Disposal):
P501 Dispose of contents and container to hazardous or special waste collection point.

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.
No specific dangers known, if the regulations/notes for storage and handling are considered.

Labeling of special preparations (GHS):
Contact with acids liberates toxic gas.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

sodium sulphite
CAS Number: 7757-83-7
Content (W/W): >= 75.0 - <= 100.0%
Synonym: Sodium sulfite

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:
Wash thoroughly with soap and water

If irritation develops, seek medical attention.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Rinse mouth and then drink 200-300 ml of water.

If symptoms persist, seek medical advice.

Most important symptoms and effects, both acute and delayed

Symptoms: allergic symptoms
Hazards: Risk of sulfur dioxide formation by reaction with gastric acid after swallowing.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
Water in copious quantities, dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
Sulphur dioxide,
The substances/groups of substances mentioned can be released if the product is involved in a fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Contaminated extinguishing water must be disposed of in accordance with official regulations.

Impact Sensitivity:
Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Ensure adequate ventilation.

Environmental precautions

Do not empty into drains.

Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.
For large amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation.

Protection against fire and explosion:
The substance/product is non-combustible.

Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances. Segregate from oxidants.

Suitable materials for containers: Stainless steel 1.4541, Stainless steel 1.4571, High density polyethylene (HDPE), Low density polyethylene (LDPE), Carbon steel (Iron)

Further information on storage conditions: Keep in a cool place. Keep container dry. Keep container in a well-ventilated place.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

The substance mentioned develops if the regulation/notes for storage and handling are not observed.

Sulphur dioxide	ACGIH, US:	STEL value 0.25 ppm ;
	OSHA Z1:	PEL 5 ppm 13 mg/m3 ;

Advice on system design:
Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:
Breathing protection if dusts are formed. Suitable respiratory protection for lower concentrations or short-term effect: Wear a NIOSH-certified (or equivalent) particulate respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:
Chemical resistant protective gloves, polyvinylchloride (PVC) - 0.7 mm coating thickness, nitrile rubber (NBR) - 0.4 mm coating thickness, chloroprene rubber (CR) - 0.5 mm coating thickness, Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing., Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Tightly fitting safety goggles (chemical goggles).

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form:	powder, crystalline	
Odour:	odourless	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	white to slightly yellow	
pH value:	8.5 - 10.5 (5 %(m), 20 °C)	(pH Meter)
melting point (decomposition):	The substance / product decomposes.Literature data.	
Freezing point:	No data available.	
Boiling point:	(1,013.25 hPa) Study scientifically not justified.	
Flash point:	Study scientifically not justified.	
Flammability:	Study scientifically not justified. not highly flammable	(other)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Vapour pressure:	Study scientifically not justified.	
Density:	2.633 g/cm3 (20 °C) Literature data.	
Relative density:	2.63 (20 °C) Literature data.	
Bulk density:	1,400 - 1,600 kg/m3	(other)
Partitioning coefficient n-octanol/water (log Pow):	-4 (25 °C)	(OECD Guideline 107)
Thermal decomposition:	500 °C	
Viscosity, dynamic:	not applicable	
Particle size:	D50 257 µm	(ISO 13320-1)
Solubility in water:	220 g/l (20 °C)	
Evaporation rate:	The product is a non-volatile solid.	

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
The product is stable if stored and handled as prescribed/indicated.
Reacts with oxidizing agents. Reacts with acids. Reacts with nitrites.

Conditions to avoid
Avoid moisture. avoid atmospheric oxygen

Incompatible materials
acids, oxidizing agents, nitrites, nitrates

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: Sulphur dioxide

Thermal decomposition:
500 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral
Type of value: LD50
Species: rat
Value: approx. 2,610 mg/kg (OECD Guideline 401)

Inhalation
Type of value: LC50
Species: rat
Value: > 5.5 mg/l (OECD Guideline 403)
Exposure time: 4 h
Tested as dust aerosol.
No mortality was observed.

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Assessment other acute effects
No applicable information available.

Irritation / corrosion
Assessment of irritating effects: Not irritating to eyes and skin.

Skin
Species: rabbit
Result: non-irritant

Method: Draize test

Species: rabbit
Result: non-irritant
Method: similar to OECD guideline 404
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Eye
Species: rabbit
Result: non-irritant
Method: Draize test

Sensitization
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: Non-sensitizing.
Method: OECD Guideline 429

Aspiration Hazard
not applicable

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects. Repeated inhalative uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity
Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in a test with mammals.

Carcinogenicity
Assessment of carcinogenicity: In long-term studies in rats in which the substance was given by feed, a carcinogenic effect was not observed. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Reproductive toxicity
Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The chemical structure does not suggest a specific alert for such an effect.

Teratogenicity
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information
Contact with acids liberates toxic gases.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish
LC50 (96 h) 316 mg/l, Leuciscus idus (DIN 38412 Part 15, static)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates
EC50 (48 h) 59 mg/l, Daphnia magna (Directive 79/831/EEC, static)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

EC50 (48 h) 230 mg/l, Daphnia magna (other, static)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants
EC50 (72 h) 31.9 mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201, static)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

EC50 (72 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to fish
No observed effect concentration (34 d) 316 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.)
The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to aquatic invertebrates
No observed effect concentration (21 d) > 10 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment of terrestrial toxicity
No data available.
Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
OECD Guideline 209 static
activated sludge of a predominantly domestic sewage/EC50 (3 h): > 1,000 mg/l

The details of the toxic effect relate to the nominal concentration.

DIN 38412 Part 8 aquatic
bacterium/EC10 (17 h): 260 mg/l
Nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Inorganic product which cannot be eliminated from water by biological purification processes.

Elimination information

Study scientifically not justified.

Assessment of stability in water
According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis)
Study scientifically not justified.

Bioaccumulative potential

Assessment bioaccumulation potential
Significant accumulation in organisms is not to be expected.

Bioaccumulation potential
Study scientifically not justified.

Mobility in soil

Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

Additional information

Other ecotoxicological advice:
Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and local regulations. This product is not regulated by RCRA.

Container disposal:
Dispose of container and any rinsate in an environmentally safe manner. Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical	TSCA, US	released / listed
Food	TSCA, US	released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
PA	7757-82-6	Sodium sulfate

NFPA Hazard codes:
Health: 0 Fire: 0 Reactivity: 0 Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Acute Tox.	5 (oral)	Acute toxicity
Aquatic Acute	3	Hazardous to the aquatic environment - acute

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2024/04/17

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring

the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET