

# Safety Data Sheet

## Sodium Sulfite anhydrous food grade (E221)

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Version: 3.0

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(30042389/SDS\_GEN\_CA/EN)

### 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 Canada Inc.

5025 Creebank Road

Building A, Floor 2

Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

#### Emergency telephone number

##### 24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: (800) 454-COPE (2673)

#### Other means of identification

Molecular formula: Na<sub>2</sub>SO<sub>3</sub>

Chemical family: sodium salt, inorganic reducing agents

Synonyms: Sodium Sulfite Anhydrous Use: chemical; food additive(s)

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### 2. Hazards Identification

#### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

#### Classification of the product

Aquatic Acute

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Hazardous to the aquatic environment - acute

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### 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.

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## 3. Composition / Information on Ingredients

### According to Hazardous Products Regulations (HPR) (SOR/2015-17)

sodium sulphite

CAS Number: 7757-83-7

Content (W/W):  $\geq 75.0$  -  $\leq 100.0\%$

Synonym: Sodium sulfite

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## 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 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.

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

Symptoms: allergic symptoms

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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.

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## 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:

Wear a self-contained breathing apparatus.

### 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.

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## 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.

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## 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.

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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 ;  |

#### Personal protective equipment

##### **Respiratory protection:**

Breathing protection if dusts are formed.

##### **Hand protection:**

Chemical resistant protective gloves, chloroprene rubber (Neoprene), nitrile rubber (Buna N), polyvinylchloride (Pylox)

##### **Eye protection:**

Tightly fitting safety goggles (chemical goggles).

##### **Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

##### **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<br>( 5 %(m), 20 °C)                                      |
| melting point<br>(decomposition): | The substance / product<br>decomposes.                              |
| Freezing point:                   | No data available.  |
| Boiling point:                    | ( 1,013.25 hPa)<br>Study scientifically not justified.              |
| Flash point:                      | Study scientifically not justified.                                 |
| Flammability:                     | Study scientifically not justified. not<br>highly flammable (other) |

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|   |   |                      |
|---|---|----------------------|
| 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/cm <sup>3</sup><br>( 20 °C)<br>Literature data.   |                      |
| Relative density:                                   | 2.63<br>( 20 °C)<br>Literature data.                      |                      |
| Bulk density:                                       | 1,400 - 1,600 kg/m <sup>3</sup>                           |                      |
| Partitioning coefficient n-octanol/water (log Pow): | -4<br>( 25 °C)  | (OECD Guideline 107) |
| Thermal decomposition:                              | 500 °C  |                      |
| Viscosity, dynamic:                                 | not applicable  |                      |
| Solubility in water:                                | 220 g/l<br>( 20 °C)                                       |                      |
| Evaporation rate:                                   | The product is a non-volatile solid.                      |                      |

## 10. Stability and Reactivity

### Reactivity

Oxidizing properties:

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

### Chemical stability

#### 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.

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### 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

#### 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-

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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: No data available concerning carcinogenic effects. The chemical structure does not suggest a specific alert for such an effect.

### 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 data available. The chemical structure does not suggest a specific alert for such an effect.

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## 12. Ecological Information

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for 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.

#### 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.

#### 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.

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### 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 (H<sub>2</sub>O)

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.

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## 13. Disposal considerations

### **Waste disposal of substance:**

Dispose of in a licensed facility. Observe all local regulations.



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### Container disposal:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

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## 14. Transport Information

### Land transport

TDG

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

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## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical DSL, CA released / listed

Food DSL, CA released / exempt

#### 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 |

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## 16. Other Information

### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2021/10/21

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.

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