

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 8.2

Revision Date 23.05.2024

Print Date 02.08.2024

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Sodium bisulfite

Product Number : 243973

Brand : SIGALD

Index-No. : 016-064-00-8

UFI : E852-C6RD-199T-TYPP

REACH No. : This product is a mixture. REACH Registration Number see section 3.

CAS-No. : 7631-90-5

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

Identified uses : Laboratory chemicals, Manufacture of substances

Uses advised against : This product is not intended for consumer use.

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

Company :

**1.4 Emergency telephone**

Emergency Phone # : +(44)-870-8200418 (CHEMTREC (GB))  
+(353)-19014670 (CHEMTREC Ireland)  
001-803-017-9114 (CHEMTREC India)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Acute toxicity, (Category 4) H302: Harmful if swallowed.

Eye irritation, (Category 2) H319: Causes serious eye irritation.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal Word

Warning

Hazard Statements

H302

Harmful if swallowed.

H319

Causes serious eye irritation.

Precautionary Statements

P264

Wash skin thoroughly after handling.

P280

Wear eye protection/ face protection.

P301 + P312

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313

If eye irritation persists: Get medical advice/ attention.

P501

Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard information (EU)

EUH031

Contact with acids liberates toxic gas.

### Reduced Labeling (<= 125 ml)

Pictogram



Signal Word

Warning

Hazard Statements

none

Precautionary Statements

none

Supplemental Hazard information (EU)

EUH031

Contact with acids liberates toxic gas.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

---

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

SIGALD- 243973

Page 2 of 14

The life science business of Merck operates as MilliporeSigma in the US and Canada



Synonyms : Sodium hydrogensulfite

Formula : NaHSO<sub>3</sub>

Molecular weight : 104.06 g/mol

Component		Classification	Concentration
<b>sodium hydrogensulphite</b>			
CAS-No.	7631-90-5	Acute Tox. 4; Eye Irrit. 2; H302, H319	<= 100 %
EC-No.	231-548-0		
Index-No.	016-064-00-8 *		

\*A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, or the annual tonnage does not require a registration.

For the full text of the H-Statements mentioned in this Section, see Section 16.

---

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

---

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.



**Unsuitable extinguishing media**

For this substance/mixture no limitations of extinguishing agents are given.

**5.2 Special hazards arising from the substance or mixture**

Sulfur oxides

Sodium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

**5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

**5.4 Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

**6.4 Reference to other sections**

For disposal see section 13.

---

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities****Storage conditions**

Tightly closed. Dry.

Do not store near acids.

Air and moisture sensitive.

**Storage class**

Storage class (TRGS 510): 13: Non Combustible Solids

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



---

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with workplace control parameters

### 8.2 Exposure controls

#### Personal protective equipment

##### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

##### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

##### Body Protection

protective clothing

##### Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

##### Control of environmental exposure

Do not let product enter drains.

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- a) Physical state                      solid

SIGALD- 243973

Page 5 of 14

The life science business of Merck operates as MilliporeSigma in the US and Canada



b) Color	white
c) Odor	No data available
d) Melting point/freezing point	Melting point/range: 300 °C
e) Initial boiling point and boiling range	No data available
f) Flammability (solid, gas)	The product is not flammable.
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	Not applicable
i) Autoignition temperature	Not applicable
j) Decomposition temperature	No data available
k) pH	4.3 at 10 g/l
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	ca.42 g/l at 20 °C - completely soluble
n) Partition coefficient: n-octanol/water	Not applicable for inorganic substances
o) Vapor pressure	No data available
p) Density	1.348 g/cm <sup>3</sup> at 20 °C - OECD Test Guideline 109
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	Not classified as explosive.
t) Oxidizing properties	none

## 9.2 Other safety information

No data available

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Contact with acids liberates toxic gas.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

SIGALD- 243973

Page 6 of 14

The life science business of Merck operates as MilliporeSigma in the US and Canada



### 10.3 Possibility of hazardous reactions

Generates dangerous gases or fumes in contact with:  
Acids

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acids

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

---

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

##### Acute toxicity

Acute toxicity estimate Oral - 770 mg/kg

(Calculation method)

LD50 Oral - Rat - male and female - 1,540 mg/kg

(OECD Test Guideline 401)

Acute toxicity estimate Oral - 1,540 mg/kg

(Calculation method)

Symptoms: Possible symptoms: mucosal irritations

LC50 Inhalation - Rat - male and female - 4 h - > 5.5 mg/l - dust/mist

(OECD Test Guideline 403)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

##### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Remarks: (in analogy to similar products)

##### Serious eye damage/eye irritation

Remarks: Mixture causes serious eye irritation.

Remarks: Causes serious eye irritation.

(in analogy to similar products)

##### Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite



## **Germ cell mutagenicity**

Test Type: Mutagenicity (mammal cell test): chromosome aberration.  
Species: Rat

Result: negative  
Remarks: (ECHA)

## **Carcinogenicity**

Carcinogenicity classification not possible from current data.

## **Reproductive toxicity**

Weight of evidence does not support classification for reproductive toxicity

## **Specific target organ toxicity - single exposure**

No data available

## **Specific target organ toxicity - repeated exposure**

No data available

## **Aspiration hazard**

No data available

## **11.2 Additional Information**

### **Endocrine disrupting properties**

#### **Product:**

Assessment

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Repeated dose toxicity - Rat - male and female - Oral  
Remarks: (ECHA)

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, chest pain  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.





## Components

### sodium hydrogensulphite

#### Acute toxicity

LD50 Oral - Rat - male and female - 1,540 mg/kg

(OECD Test Guideline 401)

Acute toxicity estimate Oral - 1,540 mg/kg

(Calculation method)

LC50 Inhalation - Rat - male and female - 4 h - > 5.5 mg/l - dust/mist

(OECD Test Guideline 403)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

Remarks: (in analogy to similar products)

#### Serious eye damage/eye irritation

Remarks: Causes serious eye irritation.

(in analogy to similar products)

#### Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: negative

(OECD Test Guideline 429)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

#### Germ cell mutagenicity

Species: Rat - male

Result: negative

Remarks: (ECHA)

#### Carcinogenicity

Carcinogenicity classification not possible from current data.

#### Reproductive toxicity

Weight of evidence does not support classification for reproductive toxicity

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

#### Aspiration hazard

No data available



---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Mixture

Toxicity to fish	static test LC50 - <i>Leuciscus idus</i> (Golden orfe) - > 215 - < 464 mg/l - 96 h Remarks: (ECHA) The value is given in analogy to the following substances: potassium sulfite
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - <i>Daphnia magna</i> (Water flea) - 89 mg/l - 48 h Remarks: (ECHA) The value is given in analogy to the following substances: sodium metabisulphite
Toxicity to algae	static test ErC50 - <i>Desmodesmus subspicatus</i> (green algae) - 43.8 mg/l - 72 h (OECD Test Guideline 201) Remarks: (ECHA) The value is given in analogy to the following substances: sodium metabisulphite
Toxicity to bacteria	static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209) Remarks: (ECHA) The value is given in analogy to the following substances: sodium sulphite
Toxicity to fish(Chronic toxicity)	flow-through test NOEC - <i>Danio rerio</i> (zebra fish) - >= 316 mg/l - 34 d (OECD Test Guideline 210)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)	semi-static test NOEC - <i>Daphnia magna</i> (Water flea) - > 10 mg/l - 21 d (OECD Test Guideline 211)

### 12.2 Persistence and degradability

Not applicable for inorganic substances

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



## 12.6 Endocrine disrupting properties

### **Product:**

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

No data available

### **Components**

#### **sodium hydrogensulphite**

Toxicity to fish

static test LC50 - Leuciscus idus (Golden orfe) - > 215 - < 464 mg/l - 96 h

Remarks: (ECHA)

The value is given in analogy to the following substances: potassium sulfite

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 89 mg/l - 48 h

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium metabisulphite

Toxicity to algae

static test ErC50 - Desmodesmus subspicatus (green algae) - 43.8 mg/l - 72 h

(OECD Test Guideline 201)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium metabisulphite

Toxicity to bacteria

static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209)

Remarks: (ECHA)

The value is given in analogy to the following substances: sodium sulphite

Toxicity to fish(Chronic toxicity)

flow-through test NOEC - Danio rerio (zebra fish) - >= 316 mg/l - 34 d

(OECD Test Guideline 210)

Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity)

semi-static test NOEC - Daphnia magna (Water flea) - > 10 mg/l - 21 d

(OECD Test Guideline 211)



---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

No data available

---

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

### 14.6 Special precautions for user

#### Further information

Not classified as dangerous in the meaning of transport regulations.

---

## SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

---

## SECTION 16: Other information

### Full text of H-Statements

H302

Harmful if swallowed.

SIGALD- 243973

Page 12 of 14

The life science business of Merck operates as MilliporeSigma in the US and Canada



H319 Causes serious eye irritation.  
EUH031 Contact with acids liberates toxic gas.

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.sigma-aldrich.com](http://www.sigma-aldrich.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the



document regarding the product remains unchanged and matches the product ordered. For further information please contact [mlsbranding@sial.com](mailto:mlsbranding@sial.com).

