

according to Regulation (EC) No. 1907/2006

Revision Date 02.09.2014

Version 10.0

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

1.1 Product identifier

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph

Eur, BP, NF, E 221

REACH Registration Number 01-2119537420-49-XXXX

CAS-No. 7757-83-7

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

Identified uses Pharmaceutical production, Cosmetic raw material

For additional information on uses please refer to the Merck Chemicals

portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0

Responsible Department LS-QHC * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

This substance is not classified as dangerous according to European Union legislation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

3.1 Substance

Formula Na₂SO₃ Na₂O₃S (Hill)

EC-No. 231-821-4 Molar mass 126,04 g/mol

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

Remarks No disclosure requirement according to Regulation (EC) No.

1907/2006

3.2 Mixture

Not applicable

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

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

shower.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

No information 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

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of:

Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

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

Further information

Suppress (knock down) gases/vapours/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. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into 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.

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Recommended storage temperature see product label.

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

Derived No Effect Level (DNEL)

Worker DNEL, longterm	Systemic effects	inhalation	298 mg/m³
Consumer DNEL, longterm	Systemic effects	inhalation	88 mg/m³

Consumer DNEL, longterm Systemic effects oral 11 mg/kg Body weight

Predicted No Effect Concentration (PNEC)

PNEC Fresh water	1,33 mg/l
PNEC Fresh water PNEC Marine water PNEC Sewage treatment plant	0,13 mg/l
PNEC Sewage treatment plant	99,9 mg/kg

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

full contact:

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

Glove material: Nitrile rubber Glove thickness: 0,11 mm Preak through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances. The entrepeneur 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.

Environmental exposure controls

Do not empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form powder

Colour white

Odour odourless

Odour Threshold Not applicable

pH 8,8 - 10

at 50 g/l 20 °C

Melting point > 500 °C

(decomposition)

Boiling point/boiling range (decomposition)

Flash point Not applicable

Evaporation rate No information available.

Flammability (solid, gas) No information available.

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapour pressure Not applicable

Relative vapour density No information available.

Density 2,63 g/cm³

at 20 °C

Relative density No information available.

Water solubility 220 g/l

at 20 °C

Partition coefficient: n- log Pow: -4 (25 °C)

octanol/water OECD Test Guideline 107

Bioaccumulation is not expected.

Auto-ignition temperature No information available.

Decomposition temperature > 500 °C

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

Ignition temperature Not applicable

Bulk density ca.1.480 kg/m³

SECTION 10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Violent reactions possible with:

nitrites

Exothermic reaction with:

Oxidizing agents

Generates dangerous gases or fumes in contact with:

acids

10.4 Conditions to avoid

Strong heating (decomposition).

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

LD50 Rat: 2.610 mg/kg (IUCLID)

Acute inhalation toxicity

LC50 Rat: > 5,5 mg/l; 4 h (IUCLID)

Acute dermal toxicity

This information is not available.

Skin irritation

Rabbit

Result: No irritation

(IUCLID)

Eye irritation

Rabbit

Result: No eye irritation

(IUCLID)

Sensitisation

This information is not available.

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Result: negative

Method: OECD Test Guideline 471

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

Did not show teratogenic effects in animal experiments. (IUCLID)

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish

LC50 Leuciscus idus (Golden orfe): 315 mg/l; 96 h

DIN 38412 T15 (External MSDS)

Toxicity to bacteria

EC10 Pseudomonas putida: 260 mg/l; 17 h (External MSDS)

12.2 Persistence and degradability

Chemical Oxygen Demand (COD)

125 mg/g

(External MSDS)

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: -4 (25 °C)

OECD Test Guideline 107

Bioaccumulation is not expected.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

12.6 Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. Transport information

Land transport (ADR/RID)

14.1 - 14.6 Not classified as dangerous in the meaning of transport

regulations.

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 - 14.6 Not classified as dangerous in the meaning of transport

regulations.

Sea transport (IMDG)

14.1 - 14.6 Not classified as dangerous in the meaning of transport

regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

according to Regulation (EC) No. 1907/2006

Catalogue No. 106652

Product name Sodium sulfite suitable for use as excipient EMPROVE® exp Ph Eur,BP,NF,E 221

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard 96/82/EC

Legislation Directive 96/82/EC does not apply

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC

not regulated

Regulation (EC) No 689/2008 concerning the export not regulated and import of dangerous chemicals

Substances of very high concern (SVHC)

This product does not contain substances

of very high concern according to

Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of \geq 0.1 % (w/w).

National legislation

Storage class 10 - 13

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC)

The product does not need to be labelled in accordance with EC directives or respective national laws.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.