

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Revision Date 09/27/2018

Version 1.7

SECTION 1. Identification

Product identifier

Product number	106357
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223
CAS-No.	7681-57-4

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

Identified uses	Cosmetic raw material, Pharmaceutical production
-----------------	--

Details of the supplier of the safety data sheet

Company	Millipore (Canada) Ltd. 2149 Winston Park Dr. Oakville Ontario L6H 6J8 Canada General Inquiries: +1 905 829 9500 Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5) MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.
---------	---

Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
---------------------	--

SECTION 2. Hazards identification

GHS Classification

Acute toxicity, Category 4, Oral, H302
Serious eye damage, Category 1, H318

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

GHS-Labeling

Hazard pictograms



Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary Statements

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph	
	Eur,BP,JP,NF,E 223	

P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ 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.
P310 Immediately call a POISON CENTER/doctor.
P330 Rinse mouth.
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula	Na ₂ O ₅ S ₂ (Hill)
Molar mass	190.11 g/mol

Hazardous ingredients

Chemical name (Concentration)

CAS-No.

sodium metabisulphite (>= 90 % - <= 100 %)

7681-57-4

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

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

Eye contact

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

Ingestion

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

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Irritation and corrosion

Risk of serious damage to eyes.

Indication of any immediate medical attention and special treatment needed

No information available.

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph	
	Eur,BP,JP,NF,E 223	

SECTION 5. Fire-fighting measures

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.

Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

Fire may cause evolution of:

Sulfur oxides

Advice for firefighters

Special protective equipment for fire-fighters

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

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

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.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

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.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry.

Store at +5°C to +30°C (+41°F to +86°F).

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph	
	Eur,BP,JP,NF,E 223	

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Ingredients

Basis	Value	Threshold limits	Remarks
<i>sodium metabisulphite 7681-57-4</i>			
CAD AB OEL	Time Weighted Average (TWA):	5 mg/m ³	
CAD BC OEL	Time Weighted Average (TWA):	5 mg/m ³	
CAD MB OEL	Time Weighted Average (TWA):	5 mg/m ³	
CAD ON OEL	Time Weighted Average (TWAEV):	5 mg/m ³	
OEL (QUE)	Time Weighted Average (TWA):	5 mg/m ³	

Engineering measures

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

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended.

Wash hands after working with substance.

Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0.11 mm
Break 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 and supplied by us as well as to the purpose specified by us. 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).

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223	

Other protective equipment:
protective clothing

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

Physical state	powder
Color	colorless
Odor	slight
Odor Threshold	No information available.
pH	3.5 - 5 at 50 g/l 68 °F (20 °C)
Melting point	ca. 302 °F (150 °C) (decomposition)
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	The product is not flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	2.36 g/cm ³ at 68 °F (20 °C)
Relative density	No information available.

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223	

Water solubility	ca.650 g/l at 68 °F (20 °C)
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	> 302 °F (> 150 °C)
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Ignition temperature	Not applicable
Bulk density	1,000 - 1,200 kg/m3

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

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

Possibility of hazardous reactions

Exothermic reaction with:

Oxidizing agents, nitrites, nitrates, Sulfides

Generates dangerous gases or fumes in contact with:

Acids

Conditions to avoid

Strong heating (decomposition).

Incompatible materials

no information available

Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Inhalation, Eye contact, Skin contact, Ingestion

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph	
	Eur,BP,JP,NF,E 223	

Acute oral toxicity

LD50 Rat: 1,540 mg/kg

OECD Test Guideline 401

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity

Symptoms: Possible damages:, mucosal irritations

Acute dermal toxicity

LD50 Rat: > 2,000 mg/kg

(RTECS)

Skin irritation

Rabbit

Result: No irritation

OECD Test Guideline 404

Eye irritation

Rabbit

Result: Eye irritation

OECD Test Guideline 405

Causes serious eye damage.

Sensitization

Sensitization test: Guinea pig

Result: negative

(External MSDS)

Genotoxicity in vitro

Ames test

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): micronucleus.

Result: negative

(IUCLID)

Carcinogenicity

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

Reproductive toxicity

No impairment of reproductive performance in animal experiments. (IUCLID)

Teratogenicity

Did not show teratogenic effects in animal experiments. (External MSDS)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223	

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Further information

After absorption:

We have no description of any toxic symptoms.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to fish

LC50 Oncorhynchus mykiss (rainbow trout): 150 - 220 mg/l; 96 h

DIN 38412 part 15

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 89 mg/l; 48 h

OECD Test Guideline 202

Toxicity to algae

IC50 Desmodesmus subspicatus (green algae): 48 mg/l; 72 h

OECD Test Guideline 201

Toxicity to bacteria

EC50 Pseudomonas putida: 56 mg/l; 17 h (IUCLID)

Persistence and degradability

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Chemical Oxygen Demand (COD)

165 mg/g

(calculated) (External MSDS)

Bioaccumulative potential

SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223	

No information available.

Mobility in soil

No information available.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Notification status

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms



SAFETY DATA SHEET

according to the Global Harmonized System (and with all of the information required by the HPR)

Product number	106357	Version 1.7
Product name	Sodium disulfite (sodium metabisulfite) EMPROVE® ESSENTIAL Ph Eur,BP,JP,NF,E 223	

Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed.

H318 Causes serious eye damage.

EUH031 Contact with acids liberates toxic gas.

Precautionary Statements

Prevention

P280 Wear eye protection.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

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.

Revision Date 09/27/2018

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.