

according to Regulation (EC) No. 1907/2006

Revision Date 17.07.2017

Version 7.3

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

1.1 Product identifier

Catalogue No. 106363

Product name Sodium bromide 99.995 Suprapur®

REACH Registration Number 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, the annual tonnage does not require a registration or the registration is envisaged for a

later registration deadline.

CAS-No. 7647-15-6

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

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merckgroup.com).

1.3 Details of the supplier of the safety data sheet

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

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

1.4 Emergency telephone

Please contact the regional company representation in your country.

number

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

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

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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 NaBr BrNa (Hill)

EC-No. 231-599-9

Molar mass 102,89 g/mol

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

1907/2006

3.2 Mixture

Not applicable

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. Remove contact lenses.

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

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4.2 Most important symptoms and effects, both acute and delayed

irritant effects, Vomiting, Convulsions, Tiredness, ataxia (impaired locomotor coordination), confusion, Coma

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:

hydrogen bromide

5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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.

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Advice for emergency responders:

Protective equipment 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

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. Protected from light.

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

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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:

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<(>,<)> 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).

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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 let product enter drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form crystals

Colour colourless

Odour odourless

Odour Threshold Not applicable

pH 5,74

at 430 g/l 22,5 °C

Melting point/freezing point 747 °C

at ca.1.013 hPa

Boiling point/boiling range 1.390 °C

at ca. 1.013 hPa

Flash point Not applicable

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Evaporation rate No information available.

Flammability (solid, gas) The product is not flammable.

Flammability (solids)

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapour pressure 1,3 hPa

at 806 °C

Relative vapour density No information available.

Density 3,2 g/cm3

at 25 °C

Relative density No information available.

Water solubility 946 g/l

at 25 °C

Partition coefficient: n-

octanol/water Not applicable

Auto-ignition temperature No information available.

Decomposition temperature > 750 °C

Viscosity, dynamic Not applicable

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

according to Regulation (EC) No. 1907/2006

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Ignition temperature Not applicable

Bulk density ca.1.750 kg/m3

SECTION 10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

Sensitivity to light

10.3 Possibility of hazardous reactions

Risk of explosion with:

Alkali metals, halogen-halogen compounds

Generates dangerous gases or fumes in contact with:

Strong acids

Release of:

hydrogen bromide

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

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SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

LD50 Rat: 4.200 mg/kg

US-EPA

Symptoms: Vomiting

Acute inhalation toxicity

Symptoms: slight mucosal irritations

Acute dermal toxicity

LD50 Rabbit: > 2.000 mg/kg OECD Test Guideline 402

Skin irritation

Rabbit

Result: No irritation

US-EPA

Eye irritation

Rabbit

Result: slight irritation

US-EPA

Sensitisation

Maximisation Test Guinea pig

Result: negative

Method: OECD Test Guideline 406 Does not cause skin sensitisation.

Germ cell mutagenicity

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Genotoxicity in vivo

Micronucleus test

Mouse

male and female

Oral

Bone marrow
Result: negative

Method: OECD Test Guideline 474

The value is given in analogy to the following substances: ammonium bromide

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): chromosome aberration.

Human lymphocytes

Result: negative

Method: OECD Test Guideline 473

unscheduled DNA synthesis assay

Result: negative

Method: OECD Test Guideline 482

Carcinogenicity

Rat

Number of exposures: daily

Method: OECD Test Guideline 453

No significant adverse effects were reported

Reproductive toxicity

Application Route: Oral

Rat

Number of exposures: daily

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Teratogenicity

This information is not available.

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

Systemic effects:

Tiredness

After uptake of large quantities:

ataxia (impaired locomotor coordination), confusion, Convulsions, Coma

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish

LC50 Poecilia reticulata (guppy): 16.000 mg/l; 96 h

NOEC Oncorhynchus mykiss (rainbow trout): 320 mg/l; 96 h

US-EPA

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 5.800 mg/l; 48 h

Toxicity to algae

EC50 Skeletonema costatum (marine diatom): > 440 mg/l; 72 h

OECD Test Guideline 201

NOEC Skeletonema costatum (marine diatom): > 440 mg/l; 72 h

OECD Test Guideline 201

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Toxicity to bacteria

static test NOEC activated sludge: 1.000 mg/l; 3 h

OECD Test Guideline 209

static test EC50 activated sludge: > 1.000 mg/l; 3 h

OECD Test Guideline 209

Toxicity to fish (Chronic toxicity)

semi-static test NOEC Poecilia reticulata (guppy): 10 mg/l; 124 d

(ECHA)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) semi-static test NOEC Daphnia magna (Water flea): 2,8 mg/l; 16 d (ECHA)

semi-static test EC10 Daphnia magna (Water flea): 43 mg/l; 16 d (ECHA)

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

Not applicable

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Discharge into the environment must be avoided.

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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

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard SEVESO III
Legislation Not applicable

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

deplete the ozone layer

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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

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.

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.