

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Water Conditioner & Biological Booster

Revision date: 24.06.2019

Product code:

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

1.1. Product identifier

Water Conditioner & Biological Booster

Further trade names

Product code: 46013, 46014, 46018, 46019, 46021, 47177, 48441

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

Use of the substance/mixture

Water treatment chemicals.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Company name: | OASE GmbH | |
| Street: | Tecklenburger Straße 161 | |
| Place: | D-48477 Hörstel | |
| Telephone: | +49 (5454) 800 | Telefax: +49 (5454) 8090 |
| e-mail: | info@oase-livingwater.com | |
| Contact person: | Markus Dreyer; Forschung und Entwicklung | Telephone: +49 (5454) 80450 |
| e-mail: | m.dreyer@oase-livingwater.com | |
| Internet: | www.oase-livingwater.com | |
| Responsible Department: | Dr. Gans-Eichler Chemieberatung GmbH Raesfeldstr. 22 D-48149 Münster | e-mail: info@tge-consult.de Tel.: +49(0)251/394868-69 www.tge-consult.de |

1.4. Emergency telephone number:

Poison Center Berlin - phone: +49 (0)30/30686 700

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

Additional advice on labelling

Labelling according to Regulation (EC) No. 1272/2008 [CLP]: none

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | Quantity |
|-----------|--------------------------------------------------|----------|
| | EC No | |
| | Index No | |
| | REACH No | |
| | GHS Classification | |
| 7631-90-5 | sodium hydrogensulphite; sodium bisulphite ... % | 4 % |
| | 231-548-0 | |
| | 016-064-00-8 | |
| | 01-2119524563-42 | |

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| Acute Tox. 4; H302 EUH031 |
|---------------------------|

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Safe handling: see section 7

Personal protection equipment: see section 8

6.2. Environmental precautions

Discharge into the environment must be avoided.

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6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 0,25°C

Protect against: Light. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|--------------------------|-----|-------------------|-----------|-----------|--------|
| 7631-90-5 | Sodium hydrogen sulphite | - | 5 | | TWA (8 h) | WEL |

DNEL/DMEL values

| CAS No | Substance | Exposure route | Effect | Value |
|-----------|--------------------------------------------------|----------------|----------|-----------------------|
| 7631-90-5 | sodium hydrogensulphite; sodium bisulphite ... % | | | |
| | Worker DNEL, long-term | inhalation | systemic | 246 mg/m ³ |
| | Consumer DNEL, long-term | inhalation | systemic | 73 mg/m ³ |
| | Consumer DNEL, long-term | oral | systemic | 9,5 mg/kg bw/day |

PNEC values

| CAS No | Substance | Environmental compartment | Value |
|-----------|--------------------------------------------------|---------------------------|-------|
| 7631-90-5 | sodium hydrogensulphite; sodium bisulphite ... % | | |

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| Freshwater | 1,09 mg/l |
| Marine water | 0,11 mg/l |
| Micro-organisms in sewage treatment plants (STP) | 10,71 mg/l |

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). DIN EN 166

Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
 Colour: grey
 Odour: odourless

pH-Value: 7,0

Changes in the physical state

Melting point: not determined
 Initial boiling point and boiling range: 100 °C
 Sublimation point: not determined
 Softening point: not determined

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| Pour point: | not determined |
| Flash point: | not determined |
| Sustaining combustion: | Not sustaining combustion |
| Explosive properties | |
| none | |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |
| Ignition temperature: | not determined |
| Auto-ignition temperature | |
| Gas: | not determined |
| Decomposition temperature: | not determined |
| Oxidizing properties | |
| none | |
| Vapour pressure: | not determined |
| Density (at 20 °C): | 1,0 g/cm ³ |
| Water solubility: | not determined |
| Solubility in other solvents | |
| not determined | |
| Partition coefficient: | not determined |
| Viscosity / dynamic: | not determined |
| Viscosity / kinematic: | not determined |
| Flow time: | not determined |
| Vapour density: | not determined |
| Evaporation rate: | not determined |
| Solvent separation test: | not determined |
| Solvent content: | not determined |
| 9.2. Other information | |
| Solid content: | not determined |

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition productsCan be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂).**SECTION 11: Toxicological information**

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11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

| CAS No | Chemical name | | | | | |
|-----------|--------------------------------------------------|---------------|----------|---------|---------------|----------|
| | Exposure route | Dose | | Species | Source | Method |
| 7631-90-5 | sodium hydrogensulphite; sodium bisulphite ... % | | | | | |
| | oral | LD50 mg/kg | 1420 | Rat | REACH Dossier | OECD 401 |
| | dermal | LD50 mg/kg | (> 2000) | Rat | REACH Dossier | OECD 402 |

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

| CAS No | Chemical name | | | | | |
|-----------|--------------------------------------------------|-------------------|-----------|------------------------------------------------------------|---------------|-----------------------------------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 7631-90-5 | sodium hydrogensulphite; sodium bisulphite ... % | | | | | |
| | Acute fish toxicity | LC50 464 mg/l | > 215 - < | 96 h Leuciscus idus | REACH Dossier | German industrial standard test g |
| | Acute algae toxicity | ErC50 mg/l | (43,8) | 72 h Desmodesmus subspicatus | REACH Dossier | OECD 201 |
| | Acute crustacea toxicity | EC50 (89) mg/l | | 48 h Daphnia magna | REACH Dossier | 79/831/EEC,V,C |
| | Fish toxicity | NOEC mg/l | >= 316 | 34 d Danio rerio | REACH Dossier | OECD 210 |
| | Crustacea toxicity | NOEC mg/l | > 10 | 21 d Daphnia magna | REACH Dossier | OECD 211 |
| | Acute bacteria toxicity | (> 1000 mg/l) | | 3 h activated sludge of a predominantly domestic sewage | REACH Dossier | OECD 209 |

12.2. Persistence and degradability

The product has not been tested.

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12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

200399 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; other municipal wastes; municipal wastes not otherwise specified

Waste disposal number of used product

200399 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; other municipal wastes; municipal wastes not otherwise specified

Waste disposal number of contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of these transport regulations.

14.2. UN proper shipping name:

No dangerous good in sense of these transport regulations.

14.3. Transport hazard class(es):

No dangerous good in sense of these transport regulations.

14.4. Packing group:

No dangerous good in sense of these transport regulations.

Inland waterways transport (ADN)

14.1. UN number:

No dangerous good in sense of these transport regulations.

14.2. UN proper shipping name:

No dangerous good in sense of these transport regulations.

14.3. Transport hazard class(es):

No dangerous good in sense of these transport regulations.

14.4. Packing group:

No dangerous good in sense of these transport regulations.

Marine transport (IMDG)

14.1. UN number:

No dangerous good in sense of these transport regulations.

14.2. UN proper shipping name:

No dangerous good in sense of these transport regulations.

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- 14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.
- Air transport (ICAO-TI/IATA-DGR)**
- 14.1. UN number:** No dangerous good in sense of these transport regulations.
- 14.2. UN proper shipping name:** No dangerous good in sense of these transport regulations.
- 14.3. Transport hazard class(es):** No dangerous good in sense of these transport regulations.
- 14.5. Environmental hazards**
- ENVIRONMENTALLY HAZARDOUS: no
- 14.6. Special precautions for user**
Refer to section 6-8
- 14.7. Transport in bulk according to Annex II of Marpol 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 regulatory information

- 2010/75/EU (VOC): No information available.
- 2004/42/EC (VOC): No information available.
- Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII, No (mixture): not relevant

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information

Changes

- Rev. 1.0; 20.12.2016, Initial release
Rev. 2.0; 24.06.2019, Documentation of changes: chapter: 2-16.

Abbreviations and acronyms

- ADR: Accord européen sur le transport des marchandises dangereuses par Route
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuer Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrdungsklasse

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.
EUH031 Contact with acids liberates toxic gas.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)