

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

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

| 1.1 | Product identifier | |
|-----|---|---|
| | Trade name | Algaecide liquid |
| | SDS-Ref | 07535 |
| 1.2 | Relevant identified uses of the substance or mixture and uses advised against | |
| | Relevant identified uses | Water treatment chemical Professional use Consumer use (private households) |
| 1.3 | Details of the supplier of the safety data sheet | Steinbach International GmbH L. Steinbach Platz 1 4311 Schwertberg Austria Telephone: +43 7262 61431 1000 e-Mail: info@steinbach-group.com e-Mail (competent person): sdb@steinbach-group.com |

1.4 Emergency telephone number

| Country | Country Name | | Telephone | Opening hours |
|---------------------|--------------------------------------|-----------|----------------------|---------------|
| Austria | Vergiftungsinformationszentrale | 1090 Wien | +43 1 406 4343 (24h) | |
| United King- dom | National Poisons Information Service | | 111 (24h) | |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

| Section | Hazard class | | Hazard class and cat- egory | Hazard state- ment |
|---------|---|---|--------------------------------|-----------------------|
| 4.1A | hazardous to the aquatic environment - acute hazard | 1 | Aquatic Acute 1 | H400 |
| 4.1C | hazardous to the aquatic environment - chronic hazard | 2 | Aquatic Chronic 2 | H411 |

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word Warning

- Pictograms GHS09

- Hazard statements

H410

Very toxic to aquatic life with long lasting effects.

| Precautionary statements | |
|--------------------------|---|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P312 | Call a POISON CENTRE/doctor if you feel unwell. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/container to hazardous or special waste collection point. |



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

- Hazardous ingredients for labelling

Replaces version: GHS 7 (2020-11-10)

N,N-Dimethyl-2-hydroxypropylammoniumchloride-polymer

2.3 Other hazards

Of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

Description of the mixture

| Name of substance | Identifier | C | Classification acc. to GHS | | Pictogra | ams | Wt% |
|--|---------------------------------|---|---|-----|-----------------------------------|-----|-------------|
| N, N-Dimethyl-2-hydroxy pylammoniumchloride-p mer solution | pro- CAS No oly- 25988-97-0 | | Acute Tox. 4 / H30 Aquatic Acute 1 / H4 Aquatic Chronic 1 / H | 100 | | ¥. | 5 – < 10 |
| Name of substance Specific Conc. Limits | | | M-Factors | | ATE | Ехр | osure route |
| N,N-Dimethyl-2-hy- droxypropylammoni- umchloride-polymer solution | propylammoni- loride-polymer | | M-factor (acute) = 10.0 | 1,6 | 972 ^{mg} / _{kg} | | oral |

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Take off immediately all contaminated clothing. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Self-protection of the first aider.

Following inhalation

Mouth to mouth resuscitation should be avoided. Use alternative methods, preferably with oxygen or compressed air driven apparatus. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Rinse mouth with water (only if the person is conscious). Let be drunken in little sips: 0, 1-0, 2l Water. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

None.



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen chloride (HCl)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: Kieselgur (diatomite), Sand, Universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Replaces version: GHS 7 (2020-11-10)



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use only in well-ventilated areas. Use local and general ventilation.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of effects

- Protect against external exposure, such as

High temperatures, Frost, UV-radiation/sunlight

Packaging compatibilities

Professional use: Only packagings which are approved (e.g. acc. to ADR) may be used. Consumer use (private households): Keep only in original container.

Conditions of storage

Keep container tightly closed in a cool place. Protect from sunlight. Keep away from children.

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This information is not available.

8.2 Exposure controls (professional use)

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

- Eye/face protection

Use safety goggle with side protection (EN 166).

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Type of material

PVC: polyvinyl chloride, NR: natural rubber, latex

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

In case of inadequate ventilation wear respiratory protection: Full face mask (DIN EN 136).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

9.1 Information on basic physical and chemical properties

SECTION 9: Physical and chemical properties

| Physical state | liquid |
|--|----------------------|
| Colour | blue |
| Odour | characteristic |
| Melting point/freezing point | not determined |
| Boiling point or initial boiling point and boiling range | 100 °C |
| Flammability | not relevant (fluid) |
| Lower and upper explosion limit | not determined |
| Flash point | not determined |
| Auto-ignition temperature | not determined |
| pH (value) | 6.5 (20 °C) |
| Kinematic viscosity | not determined |
| Particle characteristics | no data available |
| Oxidising properties | none |
| Vapour pressure | |
| Vapour pressure | 32 Pa at 25 °C |

| is not available |
|------------------|
| |
| |
| |
| ble |
| |

9.2 Other information

Information with regard to physical hazard classes Other safety characteristics Miscibility hazard classes acc. to GHS (physical hazards): not relevant

Completely miscible with water.

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

| Name of substance | CAS No | Exposure route | End- point | Value | Species |
|---|------------|-------------------|---------------|--------------------------------------|---------|
| N,N-Dimethyl-2-hydroxypropyl- ammoniumchloride-polymer solution | 25988-97-0 | oral | LD50 | 1,672 ^{mg} / _{kg} | rat |
| N,N-Dimethyl-2-hydroxypropyl- ammoniumchloride-polymer solution | 25988-97-0 | dermal | LD50 | >2,000 ^{mg} / _{kg} | rabbit |

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.



Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Γ

Very toxic to aquatic life with long lasting effects.

| Aquatic toxicity (acute) of components of the mixture | | | | | | |
|--|------------|----------|-----------------------------------|------------------|------------------|--|
| Name of substance | CAS No | Endpoint | Value | Species | Exposure time | |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | LC50 | 0.077 ^{mg} /l | rainbow trout | 96 h | |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | EC50 | 0.14 ^{mg} /1 | daphnia magna | 48 h | |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | EC50 | 0.08 ^{mg} /1 | daphnia magna | 48 h | |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | ErC50 | 0.13 ^{mg} /1 | freshwater algae | 72 h | |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | EbC50 | 0.09 ^{mg} / _l | freshwater algae | 72 h | |

Aquatic toxicity (chronic) of components of the mixture

| Name of substance | CAS No | Endpoint | Value | Species | Exposure time |
|--|------------|----------|-------------------------------------|----------------|------------------|
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | LC50 | >1,000 ^{mg} / _l | microorganisms | 28 d |
| N,N-Dimethyl-2-hy- droxypropylammonium- chloride-polymer solu- tion | 25988-97-0 | EC50 | >1,000 ^{mg} /l | microorganisms | 14 d |

12.2 Persistence and degradability

| Name of sub- stance | CAS No | Process | Degradation rate | Time | Method |
|--|------------|----------------|------------------|------|--------|
| N,N-Dimethyl-2- hydroxypropylam- moniumchloride- polymer solution | 25988-97-0 | biotic/abiotic | 81 % | 28 d | |



Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

| Degradability of components of the mixture | | | | | | | |
|--|------------|----------------|------------------|------|--------|--|--|
| Name of sub- stance | CAS No | Process | Degradation rate | Time | Method | | |
| N,N-Dimethyl-2- hydroxypropylam- moniumchloride- polymer solution | 25988-97-0 | biotic/abiotic | 28 % | 28 d | | | |

12.3 Bioaccumulative potential

Data are not available.

| Bioaccumulative potential of components of the mixture | | | | |
|--|------------|-----|---------|----------|
| Name of substance | CAS No | BCF | Log KOW | BOD5/COD |
| N,N-Dimethyl-2-hydroxypropylam- moniumchloride-polymer solution | 25988-97-0 | | -3.13 | |

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Other disposal recommendations

Dispose of contents/container to hazardous or special waste collection point. Waste treatment of containers/packagings: Mixed municipal waste.

Relevant provisions relating to waste

List of wastes (EU), Decision 2000/532/EC on the list of waste

Product Code/ Type of waste: 16 05 08*

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

| SEC | TION 14: Transport information | |
|------|--|---|
| 14.1 | UN number or ID number | 3082 |
| | ADR/RID/ADN | UN 3082 |
| | IMDG-Code | UN 3082 |
| | ICAO-TI | UN 3082 |
| 14.2 | UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| | ADR/RID/ADN | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| | IMDG-Code | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| | ICAO-TI | Environmentally hazardous substance, liquid, n.o.s. |
| | Technical name (hazardous ingredients) | N,N-Dimethyl-2-hydroxypropylammoniumchloride-polymer solution |
| 14.3 | Transport hazard class(es) | |
| | ADR/RID/ADN | 9 |
| | IMDG-Code | 9 |
| | ICAO-TI | 9 |
| 14.4 | Packing group | III (substance presenting low danger) |
| | ADR/RID/ADN | III |
| | IMDG-Code | III |
| | ICAO-TI | III |
| 14.5 | Environmental hazards | hazardous to the aquatic environment |

14.5 Environmental hazards

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

| Classification code | M6 |
|-------------------------------|--|
| Danger label(s) | 9, fish and tree |
| | |
| Environmental hazards | yes (hazardous to the aquatic environment) |
| Special provisions (SP) | 274, 335, 375, 601 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| Transport category (TC) | 3 |
| Tunnel restriction code (TRC) | - |
| Hazard identification No | 90 |
| Emergency Action Code | 3Z |
| | |



Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

| International Maritime Dangerous Goods Code | e (IMDG) - Additional information |
|---|--|
| Marine pollutant | yes (hazardous to the aquatic environment) |
| Danger label(s) | 9, fish and tree |
| | |
| Special provisions (SP) | 274, 335, 969 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 5 L |
| EmS | F-A, S-F |
| Stowage category | A |
| International Civil Aviation Organization (ICAO | -IATA/DGR) - Additional information |
| Environmental hazards | yes (hazardous to the aquatic environment) |
| Danger label(s) | 9, fish and tree |
| | |
| Special provisions (SP) | A97, A158, A197, A215 |
| Excepted quantities (EQ) | E1 |
| Limited quantities (LQ) | 30 kg |

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

| No | Name of substance | CAS No | Type of registration |
|----|-------------------|--------|-------------------------|
| 3 | Algaecide liquid | | 1907/2006/EC annex XVII |

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

| No | Dangerous substance/hazard categories | | |
|--------------------------------------|--|--|--|
| E1 | environmental hazards (hazardous to the aquatic environment, cat. 1) | | |
| Deco-Paint Directive | | | |
| VOC content 0.0009 % | | | |
| Industrial Emissions Directive (IED) | | | |
| VOC content 0.0009 % | | | |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed.

Regulation concerning the establishment of a European Pollutant Release and Transfer **Register (PRTR)**

None of the ingredients are listed.



Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

Water Framework Directive (WFD)

| List of pollutants (WFD) | | | |
|---|--------|-----------|---------|
| Name of substance | CAS No | Listed in | Remarks |
| N,N-Dimethyl-2-hydroxypropylammoniumchloride- polymer solution | | A) | |

Legend

Indicative list of the main pollutants

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National inventories

| Country | Inventory | Status |
|---------|------------|--------------------------------|
| EU | REACH Reg. | not all ingredients are listed |

Legend

REACH Reg. REACH registered substances

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety- relevant |
|---------|---|--|---------------------|
| 1.3 | Details of the supplier of the safety data sheet: Steinbach International GmbH L. Steinbach Platz 1 4311 Schwertberg Austria Telephone: +43726261431 e-Mail: info@steinbach-group.com e-Mail (competent person): sdb@steinbach-group.com | Details of the supplier of the safety data sheet: Steinbach International GmbH L. Steinbach Platz 1 4311 Schwertberg Austria Telephone: +43 7262 61431 1000 e-Mail: info@steinbach-group.com e-Mail (competent person): sdb@steinbach-group.com | yes |
| 2.3 | Other hazards | Other hazards: Of no significance | yes |
| 2.3 | Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB. | | yes |
| 3.2 | | Description of the mixture: change in the listing (table) | yes |
| 3.2 | | Description of the mixture: change in the listing (table) | yes |
| 4.1 | General notes: Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of accident or if you feel unwell, seek medical advice immedi- ately (show the label where possible). Take off immediately all con- taminated clothing. In case of unconsciousness place person in the recovery position. Never give anything by mouth. | General notes: Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. In case of accident or if you feel unwell, seek medical advice immedi- ately (show the label where possible). Take off immediately all con- taminated clothing. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Self-protection of the first aider. | yes |
| 4.1 | Following skin contact: Wash with plenty of soap and water. | | yes |
| 6.3 | Advice on how to clean up a spill: Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: Sawdust, Kieselgur (diatomite), Sand, Universal binder | Advice on how to clean up a spill: Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: Kieselgur (diatomite), Sand, Universal binder | yes |
| 8.2 | - Eye/face protection: Use safety goggle with side protection (EN 166). | | yes |



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety relevar |
|---------|--|--|----------------|
| 8.2 | | - Eye/face protection: Use safety goggle with side protection (EN 166). | yes |
| 8.2 | Hand protection: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/im- permeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. | | yes |
| 8.2 | Type of material: PVC: polyvinyl chloride, NR: natural rubber, latex | | yes |
| 8.2 | | - Hand protection: Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/im- permeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. | yes |
| 8.2 | | Type of material: PVC: polyvinyl chloride, NR: natural rubber, latex | yes |
| 8.2 | - Other protection measures: Take recovery periods for skin regeneration. Preventive skin protec- tion (barrier creams/ointments) is recommended. Wash hands thoroughly after handling. | - Other protection measures: Take recovery periods for skin regeneration. Preventive skin protec- tion (barrier creams/ointments) is recommended. | yes |
| 8.2 | Respiratory protection: In case of inadequate ventilation wear respiratory protection | Respiratory protection: In case of inadequate ventilation wear respiratory protection: Full face mask (DIN EN 136). | yes |
| 9.1 | Evaporation rate: not determined | | yes |
| 9.1 | | Kinematic viscosity: not determined | yes |
| 9.1 | | Particle characteristics: no data available | yes |
| 9.1 | | Oxidising properties: none | yes |
| 9.1 | | Vapour pressure | yes |
| 9.1 | | Density and/or relative density | yes |
| 9.1 | Vapour density: this information is not available | | yes |
| 9.1 | Viscosity: not determined | | yes |
| 9.1 | Explosive properties: none | | yes |
| 9.1 | Oxidising properties: none | | yes |
| 9.1 | | Relative vapour density: information on this property is not available | yes |
| 9.2 | Other information: There is no additional information. | Other information | yes |
| 9.2 | | Information with regard to physical hazard classes: hazard classes acc. to GHS (physical hazards): not relevant | yes |
| 9.2 | | Other safety characteristics | yes |
| 9.2 | | Miscibility: Completely miscible with water. | yes |
| 11.2 | | Information on other hazards: There is no additional information. | yes |



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety relevar |
|---------|---|--|----------------|
| 12.7 | Other adverse effects | Other adverse effects: Data are not available. | yes |
| 14.1 | | ADR/RID/ADN: UN 3082 | yes |
| 14.1 | | IMDG-Code: UN 3082 | yes |
| 14.1 | | ICAO-TI: UN 3082 | yes |
| 14.2 | | ADR/RID/ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | yes |
| 14.2 | | IMDG-Code: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | yes |
| 14.2 | | ICAO-TI: Environmentally hazardous substance, liquid, n.o.s. | yes |
| 14.3 | Class: 9 (environmentally hazardous) | | yes |
| 14.3 | | ADR/RID/ADN: 9 | yes |
| 14.3 | | IMDG-Code: 9 | yes |
| 14.3 | | ICAO-TI: 9 | yes |
| 14.4 | | ADR/RID/ADN: III | yes |
| 14.4 | | IMDG-Code: | yes |
| 14.4 | | ICAO-TI: III | yes |
| 14.7 | UN number: 3082 | | yes |
| 14.7 | Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | | yes |
| 14.7 | Class: 9 | | yes |
| 14.7 | Packing group: III | | yes |
| 14.7 | UN number: 3082 | | yes |
| 14.7 | Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. | | yes |
| 14.7 | Class: 9 | | yes |
| 14.7 | Packing group: III | | yes |
| 14.7 | UN number: 3082 | | yes |
| 14.7 | Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. | | yes |
| 14.7 | Class: 9 | | yes |



according to Regulation (EC) No. 1907/2006 (REACH)

Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Replaces version: GHS 7 (2020-11-10)

| Section | Former entry (text/value) | Actual entry (text/value) | Safety- relevant |
|---------|--|--|---------------------|
| 14.7 | Packing group: III | | yes |
| 14.7 | Special provisions (SP): A97, A158, A197 | Special provisions (SP): A97, A158, A197, A215 | yes |
| 15.1 | | Regulation on persistent organic pollutants (POP): None of the ingredients are listed. | yes |
| 16 | | Abbreviations and acronyms: change in the listing (table) | yes |
| 16 | Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA). | Key literature references and sources for data: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA). | yes |

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|-----------------|--|
| Acute Tox. | acute toxicity |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road) |
| adr/rid/adn | Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN) |
| Aquatic Acute | hazardous to the aquatic environment - acute hazard |
| Aquatic Chronic | hazardous to the aquatic environment - chronic hazard |
| ATE | Acute Toxicity Estimate |
| BCF | bioconcentration factor |
| BOD | Biochemical Oxygen Demand |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| COD | chemical oxygen demand |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| EbC50 | = EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| EC50 | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval |
| EC No | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EmS | Emergency Schedule |
| ErC50 | = EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| ICAO-TI | Technical instructions for the safe transport of dangerous goods by air |
| IMDG | International Maritime Dangerous Goods Code |
| IMDG-Code | International Maritime Dangerous Goods Code |
| index No | the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 |
| LC50 | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval |
| LD50 | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval |
| log KOW | n-octanol/water |
| M-factor | means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present |
| NLP | No-Longer Polymer |
| PBT | Persistent, Bioaccumulative and Toxic |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals |
| RID | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail) |
| SVHC | Substance of Very High Concern |
| VOC | Volatile Organic Compounds |
| vPvB | very Persistent and very Bioaccumulative |

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.



Algaecide liquid

Version number: GHS 8.0 (2021-10-20)

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text |
|------|---|
| H302 | Harmful if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.