

Trade Name: **Algae Controller**

3. Composition/information on ingredients

3.2 Mixture

Chemical nature: Liquid Mixture of substances listed below with nonhazardous additions

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C8-18-ALKYLDIMETHYL, CHLORIDES

EINECS	CAS No:	CLP Classification	Amount %
270-325-2	68424-85-1	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr 1B: H314; Aquatic Acute 1:H400	1 - 10%

4. First Aid measures

4.1 Description of first aid measures

General Personal protection for the First Aider. Immediately remove any clothing soiled by the product.

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Check for and remove any contact lenses. Open eyes wide apart. Rinse opened eye with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Effects: Immediate effects can be expected after short-term exposure.

4.3 Indication of immediate medical attention & special treatment needed

No further relevant information available

5. Fire fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

Unsuitable extinguishing media: Water with full jet

5.2 Special hazards arising from the substance or mixture

Specific Hazards during fire: Corrosive. In combustion emits toxic fumes.

5.3 Advice for firefighters

Advice for firefighters Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

6. Accidental release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal Precautions: Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid. Refer to section 8 of SDS for personal protection details.

6.2 Environmental precautions Do not discharge into drains or rivers. Contain the spillage using bunding

6.3 Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up: Clean up should be dealt with only by qualified personnel familiar with the specific substance. Absorb with liquid-binding material (sand, dry earth, universal binders) Keep in suitable closed containers for disposal.

6.4 Reference to other sections

See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment
See Section 13 for disposal information

7. Handling and storage**7.1 Precautions for safe handling**

Advice on safe handling: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2 Conditions for safe storage, including any incompatibilities.

Requirements for storage: Prevent any seepage into the ground
Protection against fire and explosion: No special measures required
Storage Conditions: Store in a cool, well-ventilated area.
Suitable Packaging: Must only be kept in original packaging
Advice on common storage: Store away from foodstuffs.

7.3 Specific end uses

No data available

8. Exposure control/personal protection**8.1 Control parameters**

Contains no substances with occupational exposure limit values

Exposure controls**8.2 Engineering measures****General Information:**

Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

Personal protective equipment

Respiratory protection

Self-contained breathing apparatus must be available in case of emergency.

Hand protection

Impermeable gloves.

Eye protection

Wear safety glasses approved to standard EN 166.

Skin and body protection

Impermeable protective clothing.

Environmental exposure controls

Dispose of in accordance with all applicable local and national regulations.

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form:	Liquid
Colour:	Blue
Odour:	Mild
Relative density:	0.994 g/cm ³
Water solubility:	Soluble

9.2 Other Information No further relevant information available

10. Stability and reactivity**10.1 Reactivity**

Reactivity Stable under recommended transport or storage conditions.

10.2 Chemical stability

Chemical stability Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Conditions to avoid Heat

10.5 Incompatible materials

Materials to avoid Strong acids. Strong bases. Strong oxidising agents.

10.6 Hazardous decomposition products

Haz. Decomp. products: In combustion emits toxic fumes.

11. Toxicological Information**11.1 Information on toxicological effects****Hazardous ingredients:**

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Route	Species	Test	Value	Units
Dermal	Rat	4hr LC50	>5000	mg/kg
Oral	Rat	LD50	795	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Effects: Immediate effects can be expected after short-term exposure.

12. Ecological Information**12.1 Toxicity**

Ecotoxicity values:

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Species	Test	Value	Units
Daphnia	EC50	48H	0.03 mg/l

Aquatic Toxicity

Species	Test	Value	Value	Units
Daphnia	EC50	48H	0.016	mg/l
Green Alga (Selenastrum capricornutu)	EC50	48H	0.02	mg/l
Rainbow Trout (Oncorhynchus mykiss)	LC50	96H	0.85	mg/l

12.2 Persistence and degradability

Persistence and degradability No data available

12.3 Bioaccumulative potential

Bioaccumulative potential No data available

12.4 Mobility in soil

Mobility in soil Readily absorbed into soil

12.5 PBT and PvB assessment

PBT Identification This product is not identified as a PBT/vPvB substance.

12.6 Other adverse effects

Other adverse effects No data available

13. Disposal Considerations**13.1 Waste treatment methods**

- Transfer to a suitable container and arrange for collection by specialised disposal company
- Disposal should be in accordance with local, state or national legislation
- Do not reuse empty containers without commercial cleaning or reconditioning
- Do not discharge into drains or the environment, dispose to an authorised waste collection point

Classification

Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority

14. Transport Information**14.1 Transport class:** UN1760**14.2 UN proper shipping name**

CORROSIVE LIQUID, N.O.S. (QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES)

14.3 Transport hazard class(es)

Class 8

14.4 Packaging Group III**14.5 Environmental hazards**

Environmentally Hazardous Yes Marine Pollutant No

14.6 Special precautions for user

Special precautions Warning: Corrosive substances.

Tunnel Code E

Transport Category 3

15. Regulatory information

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

This Safety Data Sheet is provided in compliance with REACH Regulation (EC) No 1907/2006

15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for the mixture by the supplier

16. Other information

Full text of H-statements referred to under sections 2 and 3

H302	Harmful if swallowed
H318	Causes serious eye damage.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects.

Further information

Restricted to professional users. Attention - Avoid exposure- obtain special instructions before use

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

█ Indicates updated section.