

Material Safety Data Sheet
According to 91/155 EEC

Printing date 30.11.2006

Reviewed on 30.11.2006

*** 1 Identification of substance:****Trade name: Fi-CLOR EXTRA STRONG ALGICIDE****Article number:** 11109 Fi-Clor**Application of the substance / the preparation**

Water treatment

Algicide

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CALL A LOCAL NATIONAL POISON CONTROL UNIT
FOR UK CONTACT NCEC Tel 01865 407 333*** 2 Composition/Data on components:****Chemical characterization****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 68424-85-1	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	10-25%
EINECS: 264-151-6	C, Xn, N; R 21/22-34-50	
CAS: 141-43-5	2-aminoethanol	2.5-10%
EINECS: 205-483-3	C, Xn; R 20/21/22-34	

Additional information For the wording of the listed risk phrases refer to section 16.**3 Hazard identification****Hazard description:**C Corrosive
N Dangerous for the environment**Information concerning to particular hazards to man and environment**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 21/22 Harmful in contact with skin and if swallowed.

R 34 Causes burns.

R 50 Very toxic to aquatic organisms.

Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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4 First aid measures

General information

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation In case of unconsciousness place patient stably in side position for transportation.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire fighting measures

Suitable extinguishing agents CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

6 Accidental release measures

Person-related safety precautions:

Wear protective clothing.

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

7 Handling and storage

Handling

Information for safe handling: No special precautions are necessary if used correctly.

Information about fire - and explosion protection: No special measures required.

Storage

Requirements to be met by storerooms and receptacles: Store only in unopened original receptacles.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Store receptacle in a well ventilated area.

Keep receptacle tightly sealed.

8 Exposure controls and personal protection gear

Additional information about design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

141-43-5 2-aminoethanol

WEL Short-term value: 15 mg/m³, 6 ppm

Long-term value: 7.6 mg/m³, 3 ppm

Additional information: The lists valid during the making were used as basis.

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Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: Not required.

Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles.

9 Physical and chemical properties:

General Information

Form:	Fluid
Colour:	Blue
Odour:	Characteristic

Change in condition

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	100°C

Flash point:	Not applicable
Ignition temperature:	305°C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Vapour pressure at 20°C:	23 hPa
Density at 20°C:	1.072 g/cm ³
Solubility in / Miscibility with Water:	Fully miscible
pH-value at 20°C:	7.2
Solvent content:	
Organic solvents:	15.4 %

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Water: 64.0 %

10 Stability and reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Dangerous reactions No dangerous reactions known

Dangerous decomposition products: No dangerous decomposition products known

11 Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:

Oral LD50 3813 mg/kg (rat)

Dermal LD50 > 4090 mg/kg (rabbit)

68424-85-1 Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

Oral LD50 240 mg/kg (rat)

Dermal LD50 1560 mg/kg (rat)

141-43-5 2-aminoethanol

Oral LD50 2050 mg/kg (rat)

Dermal LD50 1000 mg/kg (rbt)

Primary irritant effect:

on the skin: Caustic effect on skin and mucous membranes.

on the eye: Strong caustic effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

Harmful

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information:

Ecotoxicological effects:

Aquatic toxicity:

Oral LC50 - 96 hrs 0.572 mg/l (bluegill sunfish)

0.145 mg/l (rainbow trout)

Remark: Very toxic for fish

General notes:

Generally not hazardous for water.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

13 Disposal considerations

Product:

Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: 8 (C3) Corrosive substances.
Danger code (Kemler): 80
UN-Number: 3265
Packaging group: III
Description of goods: 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Maritime transport IMDG:

IMDG Class: 8
UN Number: 3265
Packaging group: III
EMS Number: F-A,S-B
Marine pollutant: No
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 8
UN/ID Number: 3265
Packaging group: III
Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

15 Regulations

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

Code letter and hazard designation of product:

C Corrosive
 N Dangerous for the environment

Hazard-determining components of labelling:

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides

Risk phrases:

21/22 Harmful in contact with skin and if swallowed.
 34 Causes burns.
 50 Very toxic to aquatic organisms.

Safety phrases:

1/2 Keep locked up and out of the reach of children.
 13 Keep away from food, drink and animal feedingstuffs.
 20 When using do not eat or drink.
 24/25 Avoid contact with skin and eyes.
 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 28 After contact with skin, wash immediately with plenty of water.
 29 Do not empty into drains.
 37/39 Wear suitable gloves and eye/face protection.
 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

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National regulations**Technical instructions (air):****Class Share in %**

Eau	64.0
III	5.6
NK	15.4

Waterhazard class: Generally not hazardous for water.**16 Other information:**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant R-phrases

- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
- 21/22 Harmful in contact with skin and if swallowed.
- 34 Causes burns.
- 50 Very toxic to aquatic organisms.

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*** Data compared to the previous version altered.**