

*** 1 Identification of substance:****Trade name: Fi-CLOR MULTI-FUNCTIONAL ALGICIDE (Cu-free)****Article number:** 11210 Fi-Clor 3**Application of the substance / the preparation**

Water treatment

Overwintering/ Hibernation agent

Manufacturer/Supplier:

ARCH WATER PRODUCTS FRANCE

BP 219 - 37402 Amboise Cedex - FRANCE

phone : +33 (0)2 47 23 43 00

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Further information obtainable from:

ARCH CHEMICALS Ltd

Wheldon Road - Castleford - West Yorkshire WF10 2JT - ENGLAND

Telephone: + 44 (0) 1977 714 100

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Information in case of chemical emergency:

NCEC - Tel. +44 (0)208 762 8322

{N.AMERICA >>> ACEAN (Arch Chemicals Emergency Action Network) - Tel. +1 423 780 2970}

CALL A LOCAL NATIONAL POISON CONTROL UNIT

FOR UK CONTACT NCEC Tel 01865 407 333

*** 2 Hazards identification****Hazard description:**

Xi Irritant

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 36/38 Irritating to eyes and skin.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Classification system

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

GHS label elements**Danger**

3.2/1C - Causes severe skin burns and eye damage.

**Warning**

4.1/1 - Very toxic to aquatic life with long lasting effects.

Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

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Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see label).

If eye irritation persists: Get medical advice/attention.

Wash contaminated clothing before reuse.

Collect spillage.

Storage:

Store locked up.

Disposal:

Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

Chemical characterization**Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 25988-97-0	Polymerised quaternary Ammonium compound Xn, Xi, N; R 22-36/38-50/53 Danger: Skull and crossbones 3.1.O/3, 3.2/2, 3.3/2A Warning: Environment 4.1.C/1	10-25%
CAS: 2809-21-4	Etidronic acid	2.5-10%
EINECS: 220-552-8	C; R 34 Danger: Corrosion 3.2/1B	

Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

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

Rinse with warm water.

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. If symptoms persist, consult a doctor.**After swallowing** If symptoms persist consult doctor.

5 Fire fighting measures

Suitable extinguishing agents Water spray**Protective equipment:** No special measures required.

6 Accidental release measures

Person-related safety precautions: Not required.**Measures for environmental protection:**

Keep contaminated washing water and dispose of appropriately.

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.

Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

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

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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: 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

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:	Light yellow
Odour:	Characteristic

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Change in condition**Melting point/Melting range:** undetermined**Boiling point/Boiling range:** undetermined**Flash point:** Not applicable**Self-igniting:** Product is not selfigniting.**Danger of explosion:** Product does not present an explosion hazard.**Vapour pressure at 20°C:** 23.0 hPa**Density at 20°C:** 1.100 g/cm³**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix**pH-value at 20°C:** 0.8**Solvent content:****Organic solvents:** 0.0 %**Water:** 69.8 %**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:****25988-97-0 Polymerised quaternary Ammonium compound**

Oral LD50 1865 mg/kg (rat)

Dermal LD50 > 2000 mg/kg (rabbit)

Primary irritant effect:**on the skin:** Irritant to skin and mucous membranes.**on the eye:** Irritating 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.

Irritant

12 Ecological information:**Ecotoxicological effects:****Acquatic toxicity:****25988-97-0 Polymerised quaternary Ammonium compound**

Oral LC50 - 96 hrs 0.28 mg/l (bluegill sunfish)

0.0709 mg/l (rainbow trout)

Remark: Very toxic for fish

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General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

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.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: 8 Corrosive substances.

Danger code (Kemler): 80

UN-Number: 3265

Packaging group: III

Hazard label 8

Description of goods: 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid)

Maritime transport IMDG:

IMDG Class: 8

UN Number: 3265

Label 8

Packaging group: III

EMS Number: F-A,S-B

Marine pollutant: No

Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 8

UN/ID Number: 3265

Label 8

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Packaging group: III

Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid)

UN "Model Regulation": UN3265; CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.; 8; III

Environmental hazards: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID

*15 Regulations

Labelling according to EU guidelines:

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

BPD labelling

- Best before : see date on packaging
- Dispose of this material and its container to hazardous or special waste collection point.
- Providing this container when empty is thoroughly rinsed out in the pool, it may be disposed of via the recycling scheme

Code letter and hazard designation of product:



Xi Irritant
N Dangerous for the environment

Hazard-determining components of labelling:

Polymerised quaternary Ammonium compound

Risk phrases:

- 36/38 Irritating to eyes and skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

- 2 Keep out of the reach of children.
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.
46 If swallowed, seek medical advice immediately and show this container or label.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

National regulations

Waterhazard class: Water hazard class 1 (Self-assessment): slightly 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

- 22 Harmful if swallowed.
34 Causes burns.
36/38 Irritating to eyes and skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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

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ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

