

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.01.2018

Rev. Index : 18

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**SECTION 1: Identification of the substance/mixture and of the company/
undertaking****1.1 Product identifier****Trade name: Fi-CLOR™ MULTI-FUNCTIONAL ALGICIDE (Cu-free)****Article number:** 11210 FiClor 3**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use** SU21 Consumer uses: Private households / general public / consumers**Product category**

PC37 Water treatment chemicals

PC8 Biocidal products

Application of the substance / the mixture Overwintering/ Hibernation agent**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**Arch Water Products France now part of
LONZA SPECIALTY INGREDIENTS
BP 219 - 37402 Amboise Cedex - FRANCE
phone : +33 (0)2 47 23 43 00
fax : +33 (0)2 47 23 12 21

framsds-reach.france.euwater@lonza.com

Further information obtainable from:ARCH CHEMICALS Ltd now part of
LONZA SPECIALTY INGREDIENTS
Wheldon Road - Castleford - West Yorkshire WF10 2JT - ENGLAND
Telephone: + 44 (0) 1977 714 100
Fax: + 44 (0) 870 889 5277**1.4 Emergency telephone number:**

Europe >>> NCEC - Tel. +44 (0)1235 239 670

Africa & Middle East >>> NCEC - Tel. +44 (0)1235 239 671

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

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS09

Signal word Danger

Hazard-determining components of labelling:

Polymerised quaternary Ammonium compound

Etidronic acid

Hazard statements

H290 May be corrosive to metals.

H315 Causes skin irritation.

H318 Causes serious eye damage.

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.

P103 Read label before use.

P234 Keep only in original container.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing.

P406 Store in corrosive resistant container with a resistant inner liner.

P501 Dispose of contents/container to special treatment scheme according to official regulations.

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2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 25988-97-0 Polymer	Polymerised quaternary Ammonium compound ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 2809-21-4 EINECS: 220-552-8 Reg.nr.: 01-2119510391-53-XXXX	Etidronic acid ⚠ Met. Corr.1, H290; Skin Corr. 1B, H314	2.5-10%

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

SECTION 4: First aid measures

4.1 Description of 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.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents Water spray

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions:

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.

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6.3 Methods and material for containment and cleaning up:

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

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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly.

Handling

DO NOT MIX WITH OTHER PRODUCTS
DO NOT DILUTE BEFORE USE

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

7.2 Conditions for safe storage, including any incompatibilities**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.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

8.1 Control parameters

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.

8.2 Exposure controls**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

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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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Colour:	Light yellow
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value at 20 °C: 0,8

Change in condition

Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	undetermined

Flash point: Not applicable

Flammability (solid, gaseous) Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure at 20 °C: 23 hPa

Density at 20 °C:	1,1 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with Water:

Not miscible or difficult to mix

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

Solvent content:

Organic solvents:	0,0 %
Water:	69,8 %

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9.2 Other information

No further relevant information available.

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SECTION 10: Stability and reactivity**10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials:** No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:****CAS: 25988-97-0 Polymerised quaternary Ammonium compound**

Oral	LD50	1865 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

Primary irritant effect:**Skin corrosion/irritation**

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** 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.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 25988-97-0 Polymerised quaternary Ammonium compound**

Oral	LC50 - 96 hrs	0.077 mg/l (rainbow trout) (OECD Test Guideline 203)
	CE50 - 48 hrs	0.084 mg/l (daphnia magna) (OECD Test Guideline 202)

12.2 Persistence and degradability No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Ecotoxicological effects:****Remark:** Very toxic for fish**Additional ecological information:****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.

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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.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.**SECTION 13: Disposal considerations****13.1 Waste treatment methods****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.**SECTION 14: Transport information****14.1 UN-Number**

ADR, IMDG, IATA

UN3082

14.2 UN proper shipping name

ADR

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid)

IMDG

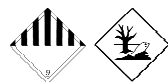
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid)

14.3 Transport hazard class(es)

ADR



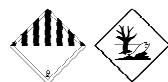
Class

9 (M6) Miscellaneous dangerous substances and articles.

Label

9

IMDG, IATA



Class

9 Miscellaneous dangerous substances and articles.

Label

9

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14.4 Packing group	III
ADR, IMDG, IATA	
14.5 Environmental hazards:	
Marine pollutant:	Yes
	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
Danger code (Kemler):	90
EMS Number:	F-A,S-B
Segregation groups	Acids
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

Transport/Additional information:

ADR	
Excepted quantities (EQ):	E1
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E

IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound, Etidronic acid), 9, III

SECTION 15: Regulatory information

REGULATION (EU) No 528/2012

Best before : see date on packaging

Providing this container when empty is thoroughly rinsed out in the pool, it may be disposed of via the recycling scheme

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

Directive 2012/18/EU

Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations

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

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15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out. (Contd. of page 8)

SECTION 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 phrases

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
*** Data compared to the previous version altered.**