

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

Printing date 03.01.2014

Rev. Index : 21

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

1.1 Product identifier

Trade name: **Fi-CLOR™ PREMIUM 5 TABLETS**

Article number: 11702 FiClor 1

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

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category

PC8 Biocidal products (e.g. Disinfectants, pest control)

PC37 Water treatment chemicals

Application of the substance / the preparation Water disinfectant

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

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS09 environment

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

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GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R22: Harmful if swallowed.

Xi; Irritant

R36/37: Irritating to eyes and respiratory system.

N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R31: Contact with acids liberates toxic gas.

Information concerning particular hazards for human 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.

Classification system:

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

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

GHS07 GHS09

Signal word Warning**Hazard-determining components of labelling:**

Symclosene {trichlorocyanuric acid <> trichloro-1,3,5-triazinetriion}

Hazard statements

H302-EUH031 Harmful if swallowed. Contact with acids liberates toxic gas.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H410 Very toxic to aquatic life with long lasting effects.
 Warning! Do not use together with other products. May release dangerous gases (chlorine).

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.
 P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash hands thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to special treatment scheme according to official regulations.

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

3 Composition/information on ingredients

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

CAS: 87-90-1	Symclosene {trichloroisocyanuric acid <> trichloro-1,3,5-triazinetriol}	50-<100%
EINECS: 201-782-8	☒ Xn R22; ☒ Xi R36/37; ☒ O R8; ☒ N R50/53 R31 ☒ Ox. Sol. 2, H272; ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☒ Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335	
CAS: 10043-35-3	boric acid	2.5-<10%
EINECS: 233-139-2	☒ T Repr. Cat. 2 R60-61 ☒ Repr. 1B, H360	
CAS: 7758-98-7	copper sulphate	0.1-<2.5%
EINECS: 231-847-6	☒ Xn R22; ☒ Xi R36/38; ☒ N R50/53 ☒ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ☒ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
CAS: 10043-01-3	aluminium sulphate	0.1-<2.5%
EINECS: 233-135-0	☒ Xi R41 ☒ Eye Dam. 1, H318	

SVHC

Contains less than de 5.5% of boric acid (Repr. 1B; H360FD: C ≥ 5,5 %).

Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) of the European Chemical Agency (ECHA)

10043-35-3 boric acid

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

4 First aid measures

4.1 Description of first aid measures**General information**

Take affected persons out into the fresh air.

Keep warm, position comfortably and cover well.

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

After inhalation Supply fresh air; consult doctor in case of complaints.**After skin contact** Rinse with warm water.**After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.**After swallowing** Call for a doctor immediately.

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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.

5 Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents** Water spray**For safety reasons unsuitable extinguishing agents** Extinguishing powder.**5.2 Special hazards arising from the substance or mixture**

Carbon monoxide (CO)

Hydrogen chloride (HCl)

During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters**Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.**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.

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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 No special precautions are necessary if used correctly.**Handling**

DO NOT MIX WITH OTHER PRODUCTS

DO NOT DISSOLVE BEFORE USE

Information about fire - and explosion protection:

Substance/product is oxidizing when dry.

Keep respiratory protective device available.

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:**

Store away from flammable substances.

Store away from reducing agents.

Do not store together with acids.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

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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.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Neoprene 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

Chloroprene rubber, CR

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.

Body protection:

Protective work clothing.

Apron

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Tablets
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value at 20 °C: 3

Change in condition

Melting point/Melting range: undetermined

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Boiling point/Boiling range:	undetermined
Flash point:	Not applicable
Flammability (solid, gaseous)	Not determined.
Ignition temperature:	
Decomposition temperature:	220 - 230 °C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not applicable.
Density at 20 °C:	1.9 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	
Water at 20 °C:	12 g/l
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
dynamic:	Not applicable.
kinematic:	Not applicable.
Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
9.2 Other information	No further relevant information available.

10 Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

NEVER MIX THIS PRODUCT WITH INORGANIC CHLORINE (HYPOCHLORITE) WITHIN THE SAME CONTAINER

Reacts with strong oxidizing agents

Reacts with alcohols, amines, aqueous acids and alkalis

Reacts with flammable substances

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: Warning! Do not use together with other products. May release dangerous gases (chlorine).

10.6 Hazardous decomposition products: Poisonous gases/vapours

Additional information:

As long as the prescribed application concentrations are maintained there is no danger that stable emulsions will form.

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11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:

87-90-1 Symclosene {trichloroisocyanuric acid <> trichloro-1,3,5-triazinetriol}

Oral LD50 490 mg/kg (rat)

10043-35-3 boric acid

Oral LD50 2660 mg/kg (rat)

7758-98-7 copper sulphate

Oral LD50 666 mg/kg (rat)

Primary irritant effect:

on the skin: No irritant effect.

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.

Harmful

Irritant

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Contains less than 5.5% of boric acid(Repr. 1B; H360FD: C ≥ 5,5 %).

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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 2 (German Regulation) (Self-assessment): hazardous for water.

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

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

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.

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Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.

14 Transport information

14.1 UN-Number**ADR, IMDG, IATA** UN3077**14.2 UN proper shipping name****ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID)**IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), MARINE POLLUTANT**IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID)**14.3 Transport hazard class(es)****ADR****Class** 9 (M7) Miscellaneous dangerous substances and articles.**Label** 9**IMDG, IATA****Class** 9 Miscellaneous dangerous substances and articles.**Label** 9**14.4 Packing group****ADR, IMDG, IATA** III**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-F**14.7 Transport in bulk according to Annex II of****MARPOL73/78 and the IBC Code** Not applicable.**Transport/Additional information:****ADR****Excepted quantities (EQ):** E1**Limited quantities (LQ)** 5 kg**Transport category** 3**Tunnel restriction code** E**UN "Model Regulation":** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), 9, III

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15 Regulatory information

Directive 98/8/EC

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

National regulations

Technical instructions (air):

Class Share in %

III	1.0
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Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

Contains less than de 5.5% of boric acid (Repr. 1B; H360FD: C ≥ 5,5 %).

Boric acid is included in the Candidate List of Substances of Very High Concern (SVHC) of the European Chemical Agency (ECHA)

10043-35-3 boric acid

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H360 May damage fertility or the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.

R36/37 Irritating to eyes and respiratory system.

R36/38 Irritating to eyes and skin.

R41 Risk of serious damage to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R60 May impair fertility.

R61 May cause harm to the unborn child.

R8 Contact with combustible material may cause fire.

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 Organization

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 Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent