

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 27.05.2009

Rev. Index : 9

Revision: 27.05.2009

**\* 1 Identification of substance:**

**Trade name:** **Fi-CLOR SPA WATER CLARIFIER**

**Article number:** 11101 Fi-Clor 1

**Application of the substance / the preparation**

Water treatment

Algicide

**Manufacturer/Supplier:**

ARCH WATER PRODUCTS FRANCE  
BP 219 - 37402 Amboise Cedex - FRANCE  
phone : +33 (0)2 47 23 43 00  
fax : +33 (0)2 47 23 12 21  
mail : archwpf@archchemicals.com

**Further information obtainable from:**

ARCH CHEMICALS Ltd  
Wheldon Road - Castleford - West Yorkshire WF10 2JT - ENGLAND  
Telephone: + 44 (0) 1977 714 100  
Fax: + 44 (0) 1977 714 006

**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**



**Warning**

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



**Warning**

3.2/2 - Causes skin irritation.

3.3/2A - Causes serious eye irritation.

**Prevention:**

Wash thoroughly after handling.

Avoid release to the environment.

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

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### **Response:**

IF ON SKIN: Wash with plenty of soap and water.

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

Specific treatment (see label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Collect spillage.

### **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	10-25%
	Danger: Skull and crossbones 3.1.O/3, 3.2/2, 3.3/2A Warning: Environment 4.1.C/1	
CAS: 7664-93-9 EINECS: 231-639-5	sulphuric acid C; R 35 Danger: Corrosion 3.2/1A	0.1-2.5%

**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.

### **Measures for cleaning/collecting:**

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

## 7 Handling and storage

### **Handling**

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

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**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 trough 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:** Dark green

**Odour:** Characteristic

**Change in condition**

**Melting point/Melting range:** -5°C

**Boiling point/Boiling range:** undetermined

**Flash point:** Not applicable

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**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product does not present an explosion hazard.

**Vapour pressure at 20°C:** 23 hPa

**Density:** Not determined

**Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix

**pH-value at 20°C:** 4.7

**Solvent content:**

**Organic solvents:** 0.0 %

**Water:** 79.5 %

## 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

**General notes:**

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

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## 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:** 9 (M6) Miscellaneous dangerous substances and articles.

**Danger code (Kemler):** 90

**UN-Number:** 3082

**Packaging group:** III

**Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound)

**Maritime transport IMDG:**

**IMDG Class:** 9

**UN Number:** 3082

**Packaging group:** III

**EMS Number:** F-A,S-F

**Marine pollutant:** No

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound)

**Air transport ICAO-TI and IATA-DGR:**



**ICAO/IATA Class:** 9

**UN/ID Number:** 3082

**Packaging group:** III

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polymerised quaternary Ammonium compound)

**UN "Model Regulation":** UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.; 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.

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- 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.

**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.
- 35 Causes severe 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

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.**