

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

Printing date 16.01.2018

Rev. Index : 34

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**SECTION 1: Identification of the substance/mixture and of the company/  
undertaking****1.1 Product identifier****Trade name: Fi-CLOR™ SPA CHLORINE GRANULES****Article number:** 11707 FiClor 3**REGULATION (EC) No 1272/2008 - ANNEX VI - International Chemical Identification**  
troclosene sodium, dihydrate**CAS Number:**

51580-86-0

**EC number:**

220-767-7

**Index number:**

613-030-01-7

**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** Water treatment - Solid Chlorinating 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 &gt;&gt;&gt; NCEC - Tel. +44 (0)1235 239 670

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

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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



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

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

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

#### Hazard pictograms



GHS07 GHS09

Signal word Warning

#### Hazard-determining components of labelling:

sodium dichloroisocyanurate, dihydrate

#### Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

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.

P261 Avoid breathing 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.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P304+P340 IF INHALED: Remove person to fresh air and keep 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.

P330 Rinse mouth.

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P337+P313 If eye irritation persists: Get medical advice/attention.  
 P391 Collect spillage.  
 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.

**Additional information:**

EUH031 Contact with acids liberates toxic gas.

EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

**2.3 Other hazards****Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

**SECTION 3: Composition/information on ingredients****3.1 Chemical characterisation: Substances****CAS No. Description:**

51580-86-0 sodium dichloroisocyanurate, dihydrate

**Identification number(s):**

EC number: 220-767-7

Index number: 613-030-01-7

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Take affected persons out into the fresh air.

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.**4.2 Most important symptoms and effects, both acute and delayed**

Breathing difficulty

Coughing

Nausea

Gastric or intestinal disorders.

**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

Use fire extinguishing methods suitable to surrounding conditions.

**For safety reasons unsuitable extinguishing agents** Extinguishing powder.**5.2 Special hazards arising from the substance or mixture**

Carbon monoxide (CO)

Hydrogen chloride (HCl)

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

**SECTION 7: Handling and storage****7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.**Handling**

**DO NOT MIX WITH OTHER PRODUCTS**  
**DO NOT DISSOLVE BEFORE USE**

**Information about fire - and explosion protection:** Substance/product is oxidising when dry.**7.2 Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and receptacles:**

Store only in unopened original receptacles.

Do not use light alloy 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.**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:****CAS: 51580-86-0 sodium dichloroisocyanurate, dihydrate**

WEL	Short-term value: 0.07 mg/m <sup>3</sup>
	Long-term value: 0.02 mg/m <sup>3</sup>
	Sen; as -NCO

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

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**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:**

Filter P2.

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:**

Rubber gloves



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**

Chloroprene rubber, CR

PVC gloves

Nitrile rubber, NBR

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.

**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:**

Granulate

**Colour:**

White

**Odour:**

Like chlorine

**Odour threshold:**

Not determined.

**pH-value:**

6

**Change in condition**

**Melting point/freezing point:**

250 °C

**Initial boiling point and boiling range:** undetermined

**Flash point:**

Not applicable

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<b>Flammability (solid, gaseous)</b>	Product is not flammable.
<b>Ignition temperature:</b>	250 °C
<b>Decomposition temperature:</b>	250 °C
<b>Auto-ignition temperature:</b>	Not determined.
<b>Explosive properties:</b>	Product does not present an explosion hazard.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapour pressure:</b>	Not applicable.
<b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
<b>Bulk density:</b>	1,000 kg/m <sup>3</sup>
<b>Relative density</b>	Not determined.
<b>Vapour density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with Water at 25 °C:</b>	250 g/l
<b>Partition coefficient: n-octanol/water:</b>	Not determined.
<b>Viscosity:</b>	
<b>dynamic:</b>	Not applicable.
<b>kinematic:</b>	Not applicable.
<b>Solids content:</b>	100,0 %
<b>9.2 Other information</b>	No further relevant information available.

## **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**

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

Reacts with alcohols, amines, aqueous acids and alkalis

Reacts with flammable substances

Reacts with strong oxidizing agents

**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

Hydrogen chloride (HCl)

Carbon monoxide

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Harmful if swallowed.

**LD/LC50 values relevant for classification:**

**CAS: 51580-86-0 sodium dichloroisocyanurate, dihydrate**

Oral | LD50 | 1,400 mg/kg (rat)

#### Primary irritant effect:

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

#### Serious eye damage/irritation

Causes serious eye irritation.

#### 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

May cause respiratory irritation.

**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:** 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.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation

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.

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

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## SECTION 14: Transport information

### 14.1 UN-Number

ADR, IMDG

UN3077

### 14.2 UN proper shipping name

ADR

3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate)

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (sodium dichloroisocyanurate, dihydrate), MARINE POLLUTANT

### 14.3 Transport hazard class(es)

ADR



Class

9 (M7) Miscellaneous dangerous substances and articles.

Label

9

IMDG



Class

9 Miscellaneous dangerous substances and articles.

Label

9

### 14.4 Packing group

ADR, IMDG

III

### 14.5 Environmental hazards:

Marine pollutant:

Yes

Symbol (fish and tree)

Symbol (fish and tree)

### Special marking (ADR):

### 14.6 Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

### Danger code (Kemler):

90

EMS Number:

F-A,S-F

Stowage Category

A

Stowage Code

SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

### 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)

5 kg

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

Transport category

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**Tunnel restriction code**

E

**IMDG****Limited quantities (LQ)**

5 kg

**Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 1000 g

**UN "Model Regulation":**

UN 3077 / UN 3082 - These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions provided the packagings meet general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SODIUM DICHLOROISOCYANURATE, DIHYDRATE), 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****Named dangerous substances - ANNEX I** Substance is not listed.**Seveso category E1** Hazardous to the Aquatic Environment**Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t**National regulations****Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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.

**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)

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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial 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

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vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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.**

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