

*** 1 Identification of substance:****Trade name: Fi-CLOR GRANULES****Article number:** 11707 Fi-Clor 1**Application of the substance / the preparation**

Water treatment

Water disinfectant

Manufacturer/Supplier:

ARCH WATER PRODUCTS FRANCE

BP 219 - 37402 Amboise Cedex - FRANCE

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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

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:**

Xn Harmful

N Dangerous for the environment

Information concerning to particular hazards to man and environment

R 22 Harmful if swallowed.

R 31 Contact with acids liberates toxic gas.

R 36/37 Irritating to eyes and respiratory system.

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

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

GHS label elements**Warning**

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

**Warning**

3.1/4 - Harmful if swallowed.

3.3/2A - Causes serious eye irritation.

3.8/3 - May cause respiratory irritation.

Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

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Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

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

Response:

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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.

Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

If eye irritation persists: Get medical advice/attention.

Collect spillage.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

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

*** 3 Composition/information on ingredients****Chemical characterization:****CAS No. Description:**

51580-86-0 sodium dichloroisocyanurate, dihydrate

Identification number(s):**EINECS Number:** 220-767-7**Index number:** 613-030-01-7**4 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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

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** Drink plenty of water and provide fresh air. Call for a doctor immediately.**5 Fire fighting measures****Suitable extinguishing agents** Water spray**For safety reasons unsuitable extinguishing agents** Extinguishing powder.**Special hazards caused by the substance, its products of combustion or resulting gases:**

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

Carbon monoxide (CO)

Hydrogen chloride (HCl)

Protective equipment: Mount respiratory protective device.**6 Accidental release measures****Person-related safety precautions:** Mount respiratory protective device.**Measures for environmental protection:**

Keep contaminated washing water and dispose of appropriately.

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

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

Inform respective authorities in case of seepage into water course or sewage system.

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Measures for cleaning/collecting:

Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

Handling

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

Information about fire - and explosion protection:

Substance/product is oxidizing when dry.
Keep respiratory protective device available.

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.
Store in cool, dry conditions in well sealed receptacles.

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

MEL Short-term value: 0.07 mg/m³
Long-term value: 0.02 mg/m³
Sen; as -NCO

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.
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.
Filter P2.

Protection of hands:

Protective gloves.

Rubber 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

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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 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:	Granulate
Colour:	White
Odour:	Like chlorine

Change in condition**Melting point/Melting range:** 250°C**Boiling point/Boiling range:** undetermined**Flash point:** Not applicable**Flammability (solid, gaseous)** Product is not flammable.**Ignition temperature:** 250°C**Decomposition temperature:** 250°C**Danger of explosion:** Product does not present an explosion hazard.**Density:** Not determined**Bulk density at 20°C:** 1000 kg/m³**Solubility in / Miscibility with****Water at 25°C:** 250 g/l**pH-value (10 g/l) at 20°C:** 6**Organic solvents:** 0.0 %**Solids content:** 100.0 %

10 Stability and reactivity

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

Dangerous decomposition products:

Poisonous gases/vapours

Hydrogen chloride (HCl)

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Carbon monoxide

11 Toxicological information

Acute toxicity:**LD/LC50 values relevant for classification:****51580-86-0 sodium dichloroisocyanurate, dihydrate**

Oral LD50 1400 mg/kg (rat)

Primary irritant effect:**on the skin:** No irritant effect.**on the eye:** Irritating effect.**Sensitization:** No sensitizing effects known.

12 Ecological information:

Ecotoxicological effects:**Aquatic toxicity:****2893-78-9 sodium salt of dichloroisocyanuric acid**

LC50 - 48 hrs 0.2 mg/l (daphnia magna)

LC50 - 96 hrs 0.22 mg/l (rainbow trout)

0.28 mg/l (bluegill sunfish)

Remark: Very toxic for fish**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

13 Disposal considerations

Product:**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.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: -

Maritime transport IMDG:**Marine pollutant:** No**UN "Model Regulation":** -**Environmental hazards:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID

15 Regulations

Labelling according to EU guidelines:

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

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Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 (REACH)

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:

Xn Harmful

N Dangerous for the environment

Hazard-determining components of labelling:

sodium dichloroisocyanurate, dihydrate

Risk phrases:

- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36/37 Irritating to eyes and respiratory system.
- 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.
- 8 Keep container dry.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29 Do not empty into drains.
- 41 In case of fire and/or explosion do not breathe fumes.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 60 This material and its container must be disposed of as hazardous waste.
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Special labelling of certain preparations:

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

National regulations**Waterhazard class:** Water hazard class 2 (Self-assessment): 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.

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

GHS: Globally Harmonized 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

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