

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

Printing date 27.05.2009

Rev. Index : 3

Revision: 27.05.2009

* 1 Identification of substance:

Trade name: Fi-CLOR PREMIUM 5 GRANULES

Article number: 11711 Fi-Clor

Application of the substance / the preparation

Water treatment

Water disinfectant

Manufacturer/Supplier:

ARCH CHEMICALS Ltd

Wheldon Road - Castleford - West Yorkshire WF10 2JT - ENGLAND

Telephone: + 44 (0) 1977 714 100

Fax: + 44 (0) 1977 714 006

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

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 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).

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

3.1/4 - Harmful if swallowed.

3.3/2A - Causes serious eye irritation.

3.8/3 - May cause respiratory irritation.

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Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
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

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 51580-86-0	sodium dichloroisocyanurate, dihydrate	50-100%
EINECS: 220-767-7	Xn, Xi, N; R 22-31-36/37-50/53	
	Danger: Skull and crossbones 3.1.O/3, 3.3/2A, 3.8/3	
	Warning: Environment 4.1.C/1	
CAS: 10043-01-3	aluminium sulphate	0.1-2.5%
EINECS: 233-135-0	Xi; R 41	
	Danger: Corrosion 3.3/1	
	Warning: Environment 4.1.C/1	
CAS: 7758-98-7	copper sulphate	0.1-2.5%
EINECS: 231-847-6	Xn, Xi, N; R 22-36/38-50/53	
	Danger: Skull and crossbones 3.1.O/3, 3.2/2, 3.3/2A	
	Warning: Environment 4.1.C/1	

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

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; 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.

5 Fire fighting measures

Suitable extinguishing agents Water spray

For safety reasons unsuitable extinguishing agents Extinguishing powder.

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Special hazards caused by the substance, its products of combustion or resulting gases:

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

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.

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

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

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.**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/m³Long-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.

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Protection of hands:

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.

Body protection: Protective work clothing.

9 Physical and chemical properties:

General Information

Form:	Granulate
Colour:	Whitish
Odour:	Characteristic

Change in condition

Melting point/Melting range: undetermined

Boiling point/Boiling range: undetermined

Flash point: Not applicable

Ignition temperature: 250°C

Decomposition temperature: 250°C

Self-igniting: Product is not selfigniting.

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

Density at 20°C: 1.000 g/cm³

Bulk density at 20°C: 1000 kg/m³

Solubility in / Miscibility with

Water at 25°C: 250 g/l

pH-value at 20°C: 6

Solvent content:

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

Reacts with strong oxidizing agents

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Reacts with alcohols, amines, aqueous acids and alkalis

Reacts with flammable substances

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

Dangerous decomposition products: Poisonous gases/vapours

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.**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

12 Ecological information:

Ecotoxicological effects:**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:** 9 (M7) Miscellaneous dangerous substances and articles.**UN-Number:** 3077**Packaging group:** III**Description of goods:** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.**Maritime transport IMDG:****UN Number:** 3077

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EMS Number: F-A,S-F**Marine pollutant:** No**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.**Air transport ICAO-TI and IATA-DGR:****UN/ID Number:** 3077**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.**UN "Model Regulation":** UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III**Environmental hazards:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID; Marine pollutant***15 Regulations****Labelling according to EU guidelines:**

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

- 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.

Relevant R-phrases

- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 36/37 Irritating to eyes and respiratory system.

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36/38 Irritating to eyes and skin.

41 Risk of serious damage to eyes.

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.**