

Material Safety Data Sheet
According to 91/155 EEC

Printing date 15.12.2004

Reviewed on 15.12.2004

*** 1 Identification of substance:****Trade name: Fi-CLOR HARDNESS INCREASER****Article number:** 10009 Fi-Clor**Application of the substance / the preparation** Water treatment**Manufacturer/Supplier:**

ARCH CHEMICALS Ltd

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

Telephone: + 44 (0) 1977 714 100

Fax: + 44 (0) 1977 712 456

Information in case of emergency:

CALL A LOCAL NATIONAL POISON CONTROL UNIT

OR ARCH USA CHEMICALS EMERGENCY 24 HOUR TEL No. + 1-423-780-2970

FOR UK CONTACT NCEC Tel 01865 407 333

2 Composition/Data on components:**Chemical characterization:****CAS No. Description:**

10043-52-4 calcium chloride

Identification number(s):**EINECS Number:** 233-140-8**EU Number:** 017-013-00-2**3 Hazard identification****Hazard description:**

Xi Irritant

Information concerning to particular hazards to man and environment

R 36 Irritating to eyes.

4 First aid measures**After inhalation** Supply fresh air; consult doctor in case of complaints.**After skin contact** Generally the product does not irritate the skin.**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** Use fire extinguishing methods suitable to surrounding conditions.**Protective equipment:** No special measures required.**6 Accidental release measures****Person-related safety precautions:** Not required.**Measures for environmental protection:** No special measures required.**Measures for cleaning/collecting:** Pick up mechanically.**7 Handling and storage****Handling****Information for safe handling:** Prevent formation of dust.**Information about fire - and explosion protection:** No special measures required.**Storage****Requirements to be met by storerooms and receptacles:** No special requirements.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.

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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: Not required.

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.

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.

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:	Solid.
Colour:	White
Odour:	Characteristic

Change in condition

Melting point/Melting range:	782°C
Boiling point/Boiling range:	undetermined

Flash point:	782°C
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Flammability (solid, gaseous) Product is not flammable.

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

Density at 20°C:	2.15 g/cm ³
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Solubility in / Miscibility with

Water at 20°C:	740 g/l
Organic solvents:	0.0 %

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

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11 Toxicological information**Acute toxicity:****LD/LC50 values relevant for classification:**

10043-52-4 calcium chloride

Oral LD50 1000 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:****General notes:** Not known to be hazardous to water.**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.**14 Transport information****Maritime transport IMDG:****Packaging group:** II**Marine pollutant:** No**15 Regulations****Labelling according to EU guidelines:**

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

Code letter and hazard designation of product:

Xi Irritant

Risk phrases:

36 Irritating to eyes.

Safety phrases:

2 Keep out of the reach of children.

22 Do not breathe dust.

24 Avoid contact with skin.

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.

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