

SAFETY DATA SHEET

1. Identification of the substance/preparation and of the company/undertaking**1.1 Product Identifier**

Trade Name: Pro-cal Extra Flowmore Tablets

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Uses: Disinfection of Swimming Pool Water

1.3 Details of the supplier of the safety data sheet

Company: Complete Pool Controls Ltd
 Unit 2, The Park
 Stoke Orchard
 Bishops Cleeve
 Gloucestershire
 GL52 7RS

Telephone: +44 (0) 8712 229081

Fax: +44 (0) 8712 229083

E-mail: sales@cpc-chemicals.co.uk**1.4 Emergency Telephone**

Tel: +44 (0) 8712 229081 (office hours) +44 (0) 1242 300271 (outside of office hours)

2. Hazard Identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Hazard Class	Hazard Category	Target Organs	Hazard Statements
Ox. Sol. 2			H272
Acute Tox. 4 *			H302
Skin Corr. 1B			H314
Aquatic Acute 1			H400

For the full text of the H statements mentioned in this section see Section 16.

Most important adverse effects

Human Health: See section 11 for toxicological information
 Physical & Chemical Hazards: See section 9 for physicochemical information
 Potential environmental effects: See section 12 for environmental information

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols:



Signal word: Danger

Hazard statements:

H272 May intensify fire; oxidiser
 H314 Causes severe skin burns and eye damage
 H400 Very toxic to aquatic life
 H302+EUH031 Harmful if swallowed. Contact with acids liberates toxic gas.
 H335+H336 May cause respiratory irritation. May cause drowsiness or dizziness
 Warning! Do not use together with other products. May release dangerous gases (chlorine)

Precautionary statements:

Keep out of reach of children

IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

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

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

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Trade Name: Pro-cal Extra Flowmore Tablets

2. Hazard Identification

Additional Labelling: EUH031 Contact with acids liberates toxic gases

Hazardous components which must be listed on the label Calcium Hypochlorite

2.3 Other Hazards Use biocides safely. Always read the label and product information before use.

3. Composition/information on ingredients

3.1 Mixtures Calcium Hypochlorite

Chemical Name	%	CAS No	EINECS	R/H Phrases
Calcium Hypochlorite	70 - 100%	7778-54-3	231-908-7	H272, H302, H314, H400

4. First Aid measures

4.1 Description of first aid measures

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting
- Get medical advice/attention

4.2 Most important symptoms and effects, both acute and delayed

- Can cause damage to the eyes and skin
- Prolonged skin or eye contact may cause chemical burns
- In cases of severe exposure, breathing difficulty may develop

4.3 Indication of immediate medical attention and special treatment needed Treat symptomatically

5. Fire fighting measures

5.1 Extinguishing media:

- In case of fire: use carbon dioxide for extinction
- DO NOT USE dry extinguishers containing ammonium compounds such as dry powder

5.2 Special hazards arising from the substance or mixture

Calcium Hypochlorite is both a strong oxidiser and is chemically reactive with many substances. Strong oxidisers are capable of intensifying a fire once started; because of this any contamination of the product with other substances by spill or otherwise should be avoided.

- Gives off irritating or toxic fumes (or gases) in a fire.
- Exposure to decomposition products may be a hazard to health
- See Section 10.6

5.3 Advice for fire-fighters

- Wear protective clothing as per section 8

Special protective equipment:

- Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit
- In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear protective clothing as per section 8
- Evacuate the area and keep personnel upwind
- Avoid raising dust
- Avoid contact with combustible material

6.2 Environmental precautions

- Avoid release to the environment
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and materials for containment and cleaning up

- Place in appropriate container
- Seal containers and label them
- Remove contaminated material to safe location for subsequent disposal
- Do not absorb spillage in sawdust or other combustible material
- Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

See Section 1 for emergency contact information

See Section 7 & 8 for information on Personal protective equipment

See section 13 for waste treatment information

7. Handling and storage

7.1 Precautions for safe handling

- Do not mix with any other products
- Ensure adequate ventilation
- Avoid contact with skin and eyes.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not eat, drink or smoke when using this product
- Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities.

- Store away from other materials.
- Keep only in original container
- Store in a dry place.
- Protect from moisture
- Store in a well-ventilated place. Keep cool.
- Do not store above 35 °C
- Keep away from foodstuff.
- Keep away from acid.
- Keep away from reducing agents

7.3 Specific end uses

- No information available

8. Exposure control/personal protection

8.1 Control parameters

Calcium hypochlorite

- WEL (short term) 2 mg/m³

8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

8. Exposure control/personal protection

8.2 Personal protective equipment

- In case of inadequate ventilation wear respiratory protection
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard EN 166.
- Wear apron or other light protective clothing

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: white, granules
- Odour: chlorine
- pH 12 at 1 % concentration
- Boiling point - not known
- Vapour pressure - not applicable
- Vapour density - not applicable
- Melting point 180° C with decomposition
- Water solubility 217 g/l at 27 °C
- Specific gravity - not known
- Flash point - not known
- Strong oxidising agent
- Partition coefficient:n-Octanol/water - not known
- Evaporation rate -not known
- Viscosity - not applicable

9.2 Other Information

- No information available

10. Stability and reactivity

10.1 Reactivity

- Strong oxidising agent
- Use with other products may release Chlorine

10.2 Chemical stability

- Decomposes above 180 °C

10.3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas
- Exothermic reaction on heating

10.4 Conditions to avoid

- Keep away from heat and moisture
- Prevent ingress of humidity and moisture into container or package. Always close the lid after use.
- Avoid contact with combustible material
- Avoid contact with foodstuffs

10.5 Incompatible materials

- Reacts with acids to produce free chlorine
- Incompatible with reducing agents
- Incompatible with metals
- Incompatible with strong oxidizing substances
- Ammonia

10. Stability and reactivity

10.6 Hazardous decomposition products

- Decomposition products may include acidic and toxic gases
- Decomposition products may include oxygen
- Decomposition products may include chlorine
- Decomposition products may include carbon oxides

11. Toxicological Information

11.1 Information on toxicological effects

- LD50 (oral, rat) 790 mg/kg
- Prolonged skin or eye contact may cause chemical burns

Inhalation

- May cause respiratory tract irritation.
- Causes delayed pulmonary oedema

Contact with skin

- Causes blistering of the skin
- Causes redness and irritation
- Can cause damage to the mucous membranes

Contact with eyes

- Causes redness and swelling
- Causes burning sensation
- Can cause damage to the eyes

Ingestion

- The ingestion of significant quantities may cause burning sensation
- The ingestion of significant quantities may cause damage to the digestive system

Carcinogenicity - No evidence of carcinogenic effects

Teratogenicity - No information available

Mutagenicity - No information available

12. Ecological Information

12.1 Toxicity

- Very toxic to aquatic life
- LC50 (bluegill sunfish) 0.088mg/l (96hr)
- LC50 (rainbow trout) 0.16mg/l (96hr)
- EC50 (Daphnia magna) 0.116mg/l (48hr)

12.2 Persistence and degradability

- No information available

12.3 Bioaccumulative potential

- No information available

12.4 Mobility in soil

- This substance is poorly absorbed onto soils or sediments
- Large volumes may penetrate soil and contaminate groundwater

12.5 Results of PBT and PvB

- Not a PBT according to REACH Annex XIII

12.6 Other adverse effects

- Do not allow product to reach ground water, water course or sewage system.
- Must not reach sewage water or drainage ditch undiluted or unneutralized.
- Danger to drinking water if even extremely small quantities leak into the ground.
- May cause long term adverse effects in the aquatic environment

13. Disposal Considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Avoid release to the environment
- Do not allow to enter public sewers and water courses
- This material and/or its container must be disposed of as hazardous waste
- Do not reuse empty containers without commercial cleaning or reconditioning

Classification

Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority

14. Transport Information



Oxidising Agent



Corrosive



Marine Pollutant

14.1 UN Number	UN3487
14.2 UN proper shipping name	CALCIUM HYPOCHLORITE, HYDRATED, CORROSIVE
14.3 Transport hazard class(es)	5.1 + 8
14.4 Packaging Group	II
14.5 Environmental hazards	Marine Pollutant
14.6 Special precautions for user	See Section 7
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

Other information

Road/Rail (ADR/RID)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE
ADR UN No.:	3487
ADR Hazard Class:	5.1(8) ADR Packing Group: II
Tunnel Code:	E

Sea (IMDG)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE
IMDG UN No.:	3487
IMDG Hazard Class:	5.1(8) IMDG Packing Group: II

Air (ICAO/IATA)

Proper Shipping Name:	CALCIUM HYPOCHLORITE ,HYDRATED, CORROSIVE
ICAO UN No.:	3487
ICAO Hazard Class:	5.1(8) ICAO Packing Group: II

Trade Name: Pro-cal Extra Flowmore Tablets

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for this substance or mixture.

This Safety Data Sheet is provided in compliance with REACH Regulation (EC) No 1907/2006

15.2 Chemical Safety Assessment

No information available

16. Other information

Text of R and S phrase codes used in this safety data sheet:- H272: May intensify fire; oxidizer.; H302: Harmful if swallowed.; H314: Causes severe skin burns and eye damage.; H400: Very toxic to aquatic life.; R22: Harmful if swallowed; R31: Contact with acids liberates toxic gas; R34: Causes burns; R50: Very toxic to aquatic organisms; R8: Contact with combustible material may cause fire.

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Rev 7

█ Indicates updated section