

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Identifier

Trade Name: HTH Calcium Hypochlorite Granules

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 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 pictograms: GHS03: Oxidising
GHS05: Corrosion
GHS07: Warning
GHS09: Environmental

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:

P261: Avoid breathing gas/mist/vapours/spray
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection

[Cont...]

2. Hazard Identification

Precautionary statements:

P301+330 + P310 IF SWALLOWED: rinse mouth. Immediately call a poison centre

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

Additional Labelling: EUH031 Contact with acids liberates toxic gases**Hazardous components which must be listed on the label** Calcium Hypochlorite**2.3 Other Hazards** No other information is available**3. Composition/information on ingredients****3.1 Mixture** Calcium Hypochlorite

A mixture of the substances below with non-hazardous additions

Chemical nature: Solid

CAS-No.	EC No	Index-No.	%	CLP Phrases
<i>Calcium Hypochlorite</i>				
7778-54-3	231-908-7	017-012-00-7		H400; H272; H302; H314
<i>Calcium Carbonate</i>				
471-34-1	207-439-9	-		H315; H319; H315
<i>Calcium Dihydroxide</i>				
1305-62-0	215-137-3	-		H400; H272; H302; H314

4. First Aid measures**4.1 Description of first aid measures**

General Advice: Take off all contaminated clothing immediately

If Inhaled: In case of accident by inhalation; remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

In case of skin contact: Wash off immediately with plenty of soap & water. If irritation appears seek medical advice

In case of eye contact: Rinse immediately with plenty of water, also under eyelids for at least 15 minutes. Remove contact lenses. Call a doctor immediately

If swallowed: Clean mouth with water and drink plenty of water. Never give anything by mouth to an unconscious person. Call for a doctor immediately

Further Information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects: See section 11 for more detailed information on health effects and Symptoms

4.3 Indication of immediate medical attention and special treatment needed

Treatment No information available

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Water Spray
Unsuitable media: Fire extinguishing powder

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Fire may cause evolution of: Hydrogen chloride (HCl) and Carbon monoxide (CO).

5.3 Advice for fire-fighters

Special PPE: Fire-fighters should wear full protective clothing and self-contained breathing apparatus (SCBA).

Further Information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Use personal protective equipment. Wear respiratory protection. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Cleaning up: Use neutralizing agent. Ensure adequate ventilation.
Further Information: Treat recovered material as described in the section 'Disposal considerations'

6.4 Reference to other sections

Other Sections See Section 1 for emergency contact information
See Section 7 for information on Personal protective equipment
See section 13 for waste treatment information

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: DO NOT MIX WITH OTHER PRODUCTS
DO NOT DISSOLVE BEFORE USE
Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the work day. Take off all contaminated clothing immediately. Provide adequate ventilation. Avoid contact with the skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities.

Storage areas : Store in cool, dry conditions
Containers Well sealed receptacles.
Fire and explosion: Product is oxidising when dry
Further information: Keep container tightly sealed.
Common storage: Store away from flammable substances, reducing agent and acids.
Storage Temperature: Do not store product where the average daily temperature exceeds 35°C. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.

7.3 Specific end uses

Specific use(s) No data available

8. Exposure control/personal protection

8.1 Control parameters No value assigned for this product

8.2 Exposure controls

Engineering measures Refer to protective measures listed in sections 7 and 8

Personal protective equipment

Respiratory protection Use respirator with appropriate filter if vapours or aerosol are released
Recommended Filter type: FP2

Hand protection Gloves
Material Chloroprene rubber, CR

Eye protection Tightly fitting safety goggles

Skin and body protection Protective work clothing

Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer systems
Avoid subsoil penetration
If the product contaminates rivers and lakes or drains inform respective authorities.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form: Free flowing granules
Colour: White
Odour: Characteristic

pH @ 20°C: 10.4 - 10.8 (1%)
Melting point: Undetermined
Boiling point: Undetermined
Flash point: not applicable
Flammability (solid, gas) Contact with combustible material may cause fire
Upper explosion limit: not applicable
Lower explosion limit: not applicable
Density @ 20°C: 0.8g/cc
Water solubility: Completely soluble
Ignition temperature: not applicable
Thermal decomposition: 170 - 180°C
Explosive properties: Product does not present an explosion hazard
Oxidising properties: Product is oxidising when dry

9.2 Other Information No further information available

10. Stability and reactivity

10.1 Reactivity

Reactivity Contact with acids liberates toxic gas

10.2 Chemical stability

Chemical stability Decomposes on heating. Decomposes on exposure to light.

10. Stability and reactivity**10.3 Possibility of hazardous reactions**

Hazardous reactions: May develop chlorine if mixed with acidic solutions

10.4 Conditions to avoid

Conditions to avoid Temperatures above 170°C (388°F)

10.5 Incompatible materials**NEVER MIX THIS PRODUCT WITH ORGANIC CHLORINE (TRICHLOR OR DICHLOR) WITHIN THE SAME CONTAINER.**

Materials to avoid Acids, organics, nitrogen containing compounds, dry powder extinguishers, corrosive, flammable or combustible materials.

10.6 Hazardous decomposition products

Haz. Decomp. products: Chlorine Gas

11. Toxicological Information**11.1 Information on toxicological effects**

LD/LC50 values relevant for classification: Acute Toxicity

7778-54-3 Calcium hypochlorite			
Value type	Value		Species
LD50 Oral	850	mg/kg	Rat
LD50 Dermal	>2	mg/kg	Rabbit
1305-62-0 Calcium dihydroxide			
LD50 Oral	7,340	mg/kg	Rat

Primary irritant effect:**on the skin:** Caustic effect on skin and mucous membranes**on the eye:** Strong caustic effect**Sensitization:** No sensitizing effects known.**Chronic toxicity** No data available**Carcinogenicity** No data available**Mutagenicity** No data available

Other relevant toxicity: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of the oesophagus and stomach.

12. Ecological Information**12.1 Toxicity**

calcium hypochlorite			7778-54-3
Test	Species	Value	Units
LC50	Bluegill sunfish (96hr)	0.088	mg/l
LC50	Rainbow Trout (96hr)	0.16	mg/l
LC50	Daphnia Magna (48hr)	0.11	mg/l
LC/LC50	Bobwhite quail oral	>3474	ppm
LC/LC50	Bobwhite quail dietary	>3474	ppm
LC/LC50	Mallard duck	>3474	ppm

12.2 Persistence and degradability

Persistence and degradability No data available

[Cont...]

12. Ecological Information**12.3 Bioaccumulative potential**

Bioaccumulative potential No data available

12.4 Mobility in soil

Mobility in soil No data available

12.5 Results of PBT and PvB :

PBT and PvB : No data available

12.6 Other adverse effects

Water hazard Class 2 (German Regulation) (self assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system
Must not reach sewage water or drainage ditch undiluted or un-neutralised
Danger to drinking water if even small quantities leak into the ground.

13. Disposal Considerations**13.1 Waste treatment methods**

- Disposal should be in accordance with local, state or national legislation
- Do not reuse empty containers without commercial cleaning or reconditioning
- Do not discharge into drains or the environment ,dispose to an authorised waste collection point

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**14.1 UN Number** 2880**14.2 UN proper shipping name** 2880 Calcium Hypochlorite mixture, hydrated Corrosive**14.3 Transport hazard class(es)**

Class	8 + 5.1
Classification Code	O2
Hazard label	50
Transport Category	3
Tunnel Code	E
Special Marking	Symbol (fish and tree)
LQ	11

14.4 Packaging Group III**14.5 Environmental hazards**

Environmentally Hazardous	Yes
Marine Pollutant	Yes

14.6 Special precautions for user No further information available**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

No further information available

Trade Name: HtH Calcium Hypochlorite Granules

15. Regulatory information

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

15.2 Chemical Safety Assessment

No data available

16. Other information

Full text of H-statements referred to under sections 2 and 3

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

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Rev 4

Indicates updated section

