

SAFETY DATA SHEET

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: Water Treatment Biocide

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
Eye Dam. 1	H318
STOT SE 3	H335
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: GHS05: GHS07: GHS09:

Signal word: Danger

Hazard statements: H272: May intensify fire; oxidiser
 H302: Harmful if swallowed
 H314: Causes severe skin burns and eye damage
 H400: Very toxic to aquatic life
 H335: May cause respiratory irritation.

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

Precautionary statements: P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P273: Avoid release to the environment
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P301+330 + P310 IF SWALLOWED: rinse mouth. Immediately call a poison centre

Trade Name: HtH Calcium Hypochlorite Granules

2. Hazard Identification

Precautionary statements:

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

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P5001 Dispose of contents/container in accordance with national regulations.

Additional Labelling: EUH031 Contact with acids liberates toxic gases

Contains: CALCIUM HYPOCHLORITE, CALCIUM HYDROXIDE, Calcium chlorate

2.3 Other Hazards No other information is available

3. Composition/information on ingredients

3.2 Mixture

CAS-No.	EC No	Index-No.	%	CLP Phrases
<i>Calcium Hypochlorite</i>				
7778-54-3	231-908-7	-	60 - 100%	Ox. Sol. 2 - H272 : Aquatic Acute 1 - H400 : Eye Dam. 1 - H318 STOT SE 3 - H335 : Skin Corr. 1B - H314 : Acute Tox. 4 - H302
<i>Calcium Chloride</i>				
10043-52-4	233-140-8	012119494219-28	1 - 5%	Eye Irrit. 2 - H319
<i>Calcium Hydroxide</i>				
1305-62-0	215-137-3	01-2119475151-45	1 - 10%	Skin Irrit. 2 - H315 : Eye Dam. 1 - H318 : STOT SE 3 - H335
<i>Calcium chlorate</i>				
10137-74-3	233-378-2	-	1 - 5%	Ox. Sol. 2 - H272

4. First Aid measures

4.1 Description of first aid measures

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.

Ingestion: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact: Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Irritating to respiratory system.

Ingestion: May cause chemical burns in mouth, oesophagus and stomach. May cause stomach pain or vomiting.

Skin contact: Skin contact:

Eye contact: Severe irritation, burning and tearing. May cause chemical eye burns.

4.3 Indication of immediate medical attention and special treatment needed

Notes for the doctor: Treat symptomatically

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Water. Carbon dioxide (CO₂).
Unsuitable media: Fire extinguishing powder

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Chlorine. Carbon monoxide (CO). Carbon dioxide (CO₂).
Haz. Combustion Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours

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: Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust and contact with skin and eyes. Provide adequate ventilation.

6.2 Environmental precautions

Environmental precautions: Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleaning up

Cleaning up: Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely.

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

Usage precautions Avoid spilling, skin and eye contact. Provide adequate ventilation. Avoid generation and spreading of dust. Avoid inhalation of dust.

7.2 Conditions for safe storage, including any incompatibilities.

Storage precautions Store in closed original container at temperatures between 0°C and 30°C.
Suitable container materials: Polyethylene. Polyethylene-lined mild steel.
Store away from the following materials: Reducing agents. Acids.
Keep away from flammable and combustible materials.
Keep away from food, drink and animal feeding stuffs.

Storage class Oxidiser storage.

7.3 Specific end uses

Specific use(s) The identified uses for this product are detailed in Section 1.2.

8. Exposure control/personal protection**8.1 Control parameters**

Occupational exposure limits

CALCIUM HYDROXIDE

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³

WEL = Workplace Exposure Limit

DNEL Industry - Inhalation; Long term : 5 mg/m³
Industry - Inhalation; Short term : 10 mg/m³
Consumer - Inhalation; Long term : 2.5 mg/m³
Consumer - Inhalation; Short term : 5 mg/m³

8.2 Exposure controls**Protective equipment**

Engineering measures	Provide adequate ventilation. Avoid inhalation of dust. Observe any occupational exposure limits for the product or ingredients
Eye/face protection	Wear tight-fitting, chemical splash goggles or face shield.
Hand protection	Use protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Neoprene gloves are recommended. EN 374
Hygiene measures	Provide eyewash station and safety shower. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace. When using do not eat, drink or smoke.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Particulate filter, type P2. EN 136/140/145/143/149

9. Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form:	Free flowing granules
Colour:	White
Odour:	Characteristic
Odour Threshold:	data lacking
pH @ 20°C:	pH (diluted solution): 10.5 - 11.5 1% @ 20 °C
Melting point:	100°C
Boiling point:	Undetermined
Flash point:	not applicable
Flammability (solid, gas)	Not applicable.
Upper explosion limit:	not applicable
Lower explosion limit:	not applicable
Density @ 20°C:	0.9 g/cm ³ @ 20°C
Water solubility:	217 g/l water @ 20°C
Ignition temperature:	not applicable
Thermal decomposition:	170 - 180°C
Explosive properties:	Data lacking.
Oxidising properties:	Product is oxidising when dry

9.2 Other Information Not determined.

10. Stability and reactivity

10.1 Reactivity

Reactivity The following materials may react with the product: Acids. Alkalis. Oxidising materials. Alcohols, glycols. Amines.

10.2 Chemical stability

Chemical stability Stable under the prescribed storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: Contact with acids liberates toxic gas.

10.4 Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5 Incompatible materials

Materials to avoid Strong acids. Strong oxidising agents. Strong alkalis. Alcohols, glycols. Amines.

10.6 Hazardous decomposition products

Haz. Decomp. products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours: Chlorine

11. Toxilogical Information

11.1 Information on toxilogical effects

Acute toxicity	oral ATE oral (mg/kg)	625
Acute toxicity	dermal Notes (dermal LD ₅₀)	Data lacking.
Acute toxicity	inhalation Notes (inhalation LC ₅₀)	Data lacking.
Skin corrosion/irritation	Animal data	Data lacking.
Skin sensitisation		Data lacking.
Germ cell mutagenicity	Genotoxicity - in vitro	Data lacking.
Carcinogenicity		Data lacking.
Reproductive toxicity	fertility	Data lacking.
STOT - single exposure		Data lacking.
STOT - repeated exposure		Data lacking.

Inhalation May cause respiratory irritation.
 Ingestion Harmful if swallowed. May cause chemical burns in mouth, oesophagus and stomach.
 Skin contact Irritating to skin. Causes burns.
 Eye contact May cause chemical eye burns.

Calcium Hypochlorite

Acute toxicity - oral
 ATE oral (mg/kg) 500

12. Ecological Information

Ecotoxicity: The product contains a substance which is very toxic to aquatic organisms.

12.1 Toxicity

Toxicity Very toxic to aquatic organisms
 Ecological information on ingredients. CALCIUM HYPOCHLORITE
 Acute aquatic toxicity
 LE(C)₅₀ 0.01 < L(E)C50 ≤ 0.1
 M factor (Acute) 10
 Acute toxicity - LC50, 96 hours, 96 hours: 0.16 mg/l, Onchorhynchus mykiss (Rainbow trout)

[Cont...]

Trade Name: HtH Calcium Hypochlorite Granules

12. Ecological Information

12.2 Persistence and degradability

Persistence and degradability: The product contains only inorganic substances which are not biodegradable.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

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

Other adverse effects Not known.

13. Disposal Considerations

13.1 Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

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

ADR/RID/IMG/ICAO CALCIUM HYPOCHLORITE, HYDRATED or CALCIUM HYPOCHLORITE, HYDRATED MIXTURE

14.3 Transport hazard class(es)

ADR/RID/IMG/ICAO 5.1



14.4 Packaging Group

II

14.5 Environmental hazards

Environmentally Hazardous Yes
Marine Pollutant Yes



14.6 Special precautions for user

EmS F-H, S-Q
Emergency Action Code 1W
Hazard Identification Number (ADR/RID) 50
Tunnel restriction code (E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No further information available

15. Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). This product may impact SEVESO storage regulations.
Guidance	CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131.
Water hazard classification	WGK 2

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.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- EUH031 Contact with acids liberates toxic gases

This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty or merchantability, or fitness for any particular use, or any other warranty, express or implied, with respect to this information, and we assume no liability resulting from use of this information. Users should make their own investigations to determine the suitability of the information for their particular needs and uses.

Rev 5

Indicates updated section