



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

1.1 Product Identifier

Trade Name: HTH Easiflo Granules

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

Uses: Disinfection of Swimming Pool Water

Restrictions: At this time we do not have information on use restrictions

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)

2. Hazard Identification

Precautionary statements:

Prevention	P261	Avoid breathing gas/mist/vapours/spray
	P273:	Avoid release to the environment
	P280:	Wear protective gloves/protective clothing/eye protection/face protection
Response	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 Substances	Calcium Hypochlorite				
Chemical nature:	Solid				
Chemical Name	CAS No	ENICS No	%	Index	CLP Phrases
Calcium Hypochlorite	7778-54-3	231-908-7	50<100%	017-012-00-7	H272;H314;H400;H302;H335;H336
Ingredients					
Calcium Carbonate	471-34-1	207-439-9			-
Calcium Chloride	10043-52-4	233-140-8			H319
Calcium Dihydroxide	1305-62-0	215-137-3			H315;H318;H335
Calcium Chlorate	10137-74-3	233-378-2			H272
Sodium Chloride	7647-14-5	231-598-3			-

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 extinguishing media: Water Spray
Unsuitable extinguishing media: Fire extinguishing powder

5.2 Special hazards arising from the substance or mixture

Specific Hazards during fire fighting: Fire may cause evolution of
Hydrogen chloride (HCl)
Carbon monoxide (CO)

5.3 Advice for fire-fighters

Special protective equipment: 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

Methods and materials for containment and 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

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.

Requirements for storage : 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. Handling and storage**7.2 Conditions for safe storage, including any incompatibilities.**

Advice on protection against fire and	Product is oxidising when dry
Further information:	Keep container tightly sealed.
Advice on common storage:	Store away from flammable substances, reducing agent and acids.

7.3 Specific end uses

Specific use(s)	No information 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	Advice: Use respirator with appropriate filter if vapours or aerosol are released
	Recommended Filter type: FP2

Hand protection	Advice: Gloves
	Material Chloroprene rubber, CR

Eye protection	Advice: Tightly fitting safety goggles
----------------	--

Skin and body protection	
	Advice: 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:	Granules
Colour:	Whitish
Odour:	Characteristic
pH @ 20°C:	10.5 / 11.5
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:	1.3 g/cm ³
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**

Advice: Contact with acids liberates toxic gas

10.2 Chemical stability

Advice: Decomposes on heating
Decomposes on exposure to light.

10.3 Possibility of hazardous reactions

Hazardous reactions: May develop chlorine if mixed with acidic solutions

10.4 Conditions to avoid

Conditions to avoid Heat

10.5 Incompatible materials

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

Materials to avoid Strong oxidising agents
Alcohols, amines, aqueous acids and alkalis
Flammable substances

10.6 Hazardous decomposition products

Hazardous decomposition products: Poisonous gases

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

Value type	Value		Species
7778-54-3 Calcium hypochlorite			
LD50 Oral	850	mg/kg	Rat
1305-62-0 Calcium dihydroxide			
LD50 Oral	7,340	mg/kg	Rat
10043-52-4 Calcium chloride			
LD50 Oral	1,000	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**

Aquatic Toxicity:		7778-54-3	calcium hypochlorite
LC/LD50		3,474 mg/kg	Bobwhite quail
	dietary	5,000 ppm	Bobwhite quail
LC50	48 hrs	1.11 mg/l	Daphnia Magna
LC50	96 hrs	0.088 mg/l	Bluegill sunfish (96hr)
LC50	96 hrs	0.16 mg/l	Rainbow Trout
LC/LD50	dietary	>5,000 ppm	Mallard duck

12.2 Persistence and degradability

Persistence and degradability No information Available

12.3 Bioaccumulative potential

Currently we do not have any information from our supplier about this.

12.4 Mobility in soil

Currently we do not have any information from our supplier about this.

12.5 Results of PBT and PvB

Currently we do not have any information from our supplier about this.

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

15. Regulatory information

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

15.2 Chemical Safety Assessment

Currently we do not have any information from our supplier about this.

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

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.

• Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuse 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 Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGF Dangerous goods Regulations by the 'International Air Transport Association' (IATA)

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS European Inventory of Existing Commercial Chemical Substances.

CAS: Chemicals Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Rev 4

Indicates updated section