

HTH Calcium Hypochlorite Easiflo Tablets

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

1.1 Product Identifier

Trade Name: HTH Calcium Hypochlorite Easiflo Tablets

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) 371 2229084 (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.

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

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

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children

P103: Read label before use

p210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

p220: Keep away from clothing and other combustible materials.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

2. Hazard Identification

Precautionary statements:

- P264: Wash contaminated skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- 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
- P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water
- 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
- P363: Wash contaminated clothing before reuse.
- P370+P378 In case of fire:
- P391 Collect spillage.
- P405 Store locked up
- P501 Dispose of contents/container in accordance with national regulations.

Additional Labelling:

- EUH031 Contact with acids liberates toxic gases
- EUH206 Warning! Do not use together with other products. May release dangerous gases (chlorine).

Contains:

CALCIUM HYPOCHLORITE, CALCIUM HYDROXIDE, Calcium chlorate

2.3 Other Hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable

3. Composition/information on ingredients

3.2 Mixture

Impurities and stabilising additives

CAS-No.	EC No	CLP Phrases
<i>calcium carbonate</i> - Reg.nr.: 01-2119486795-18-XXXX		
1305-62-0	215-137-3	Skin Irrit. 2 - H315 : Eye Dam. 1 - H318 : STOT SE 3 - H335
<i>calcium dihydroxide</i>		
1305-62-0	215-137-3	Skin Irrit. 2 - H315 : Eye Dam. 1 - H318 : STOT SE 3 - H335
<i>Calcium Chloride</i> - Reg.nr.: 01-2119494219-28-XXXX		
10043-52-4	233-140-8	Eye Dam.1 - H318
<i>Calcium chlorate</i>		
10137-74-3	233-378-2	Ox. Sol. 2 - H272
<i>sodium chloride</i> - Reg.nr.: 01-2119485491-33-XXXX		
7647-14-5	231-598-3	Skin Irrit. 2 - H315 : Eye Dam. 1 - H318 : STOT SE 3 - H335

3. Composition/information on ingredients

3.2 Mixture

Dangerous components:

CAS-No.	EC No	%	CLP Phrases
<i>Calcium Hypochlorite</i>			<i>M factor (Acute) = 10</i>
7778-54-3	231-908-7	50 - 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>Skin Corr. 1B; H314: C ≥ 5 %</i> <i>Skin Irrit. 2; H315: 1 % ≤ C < 5 %</i> <i>Eye Dam. 1; H318: C ≥ 3 %</i> <i>Eye Irrit. 2; H319: 0.5 % ≤ C < 3 %</i>
<i>Calcium Chloride - Reg.nr.: 01-2119494219-28-XXXX</i>			
10043-52-4	233-140-8	<2%	Acute Tox. 4, H302; Eye Irrit. 2, H319
<i>calcium dihydroxide</i>			
1305-62-0	215-137-3	<3%	Eye Dam. 1 - H318
<i>Calcium chlorate</i>			
10137-74-3	233-378-2	<2%	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. - Breathing difficulty / coughing
Ingestion	Nausea, gastric or internal disorders

4.3 Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically
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5. Fire fighting measures

5.1 Extinguishing media:

Suitable media:	Water. Carbon dioxide (CO ₂). Use fire extinguishing methods suitable to surrounding conditions.
Unsuitable media:	Extinguishing powder.

5. Fire fighting measures

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Carbon monoxide (CO). Hydrogen chloride (HCl)
Haz. Combustion Products: During heating or in case of fire poisonous gases are produced.

5.3 Advice for fire-fighters

Special PPE: Wear fully protective suit.
Wear self-contained respiratory protective device.
Mount respiratory protective device.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Use respiratory protective device against the effects of fumes/dust/aerosol.
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Environmental precautions: Keep contaminated washing water and dispose of appropriately.
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course / sewage system.
Do not allow to enter sewers/ surface or ground water

6.3 Methods and materials for containment and cleaning up

Cleaning up: Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

6.4 Reference to other sections

Other Sections See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information

7. Handling and storage

7.1 Precautions for safe handling

Usage precautions Any unavoidable deposit of dust must be regularly removed.
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.



DO NOT MIX WITH OTHER PRODUCTS
DO NOT DISSOLVE BEFORE USE

7.2 Conditions for safe storage, including any incompatibilities.

Storage precautions Store in closed original container at temperatures not exceeding exceeding 35°C..
Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products
Common Storage Store away from flammable substance and reducing agents.
Do not store together with acids.
Further information: Keep receptacle tightly sealed.

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

Ingredients with limit values that require monitoring at the workplace: Not required

Additional information: The lists valid during the making were used as basis

8.2 Exposure controls

Protective equipment



General 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 and skin.

Respiratory protection

Use suitable respiratory protective device only when aerosol or mist is formed.
Use suitable respiratory protective device when high concentrations are present.
Filter P2.
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

Hand protection

Protective Gloves

The glove material has to be impermeable and resistant to the product

Material of gloves

Chloroprene rubber, CR

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 gloves and has to be observed

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Body protection:

Apron

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Tablets
Colour:	White
Odour:	Characteristic
Odour Threshold:	data lacking
pH @ 20°C:	11.5
Melting point:	100°C
Initial boiling point and range	Not determined.
Flammability (solid, gaseous)	Product is not flammable.
Decomposition temperature:	170 - 180 °C
Auto-ignition temperature:	Not determined.

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

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure Not applicable.

Density at 20 °C: 1.3 g/cm³

Relative density Not determined.

Vapour density Not applicable.

Evaporation rate Not applicable.

Solubility in Water at 20 °C: 217 g/l

Partition coefficient: n-octanol/water: Not determined

Viscosity:

dynamic: Not applicable.

kinematic: Not applicable.

Solids content: 100%

9.2 Other Information

No information required.

10. Stability and reactivity**10.1 Reactivity**

Reactivity No further relevant information available.

10.2 Chemical stability

Chemical stability Thermal decomposition / conditions to be avoided:
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

10.3 Possibility of hazardous reactions

Hazardous reactions: NEVER MIX THIS PRODUCT WITH ORGANIC CHLORINE (TRICHLOR or DICHLOR) WITHIN THE SAME CONTAINER
Reacts with strong oxidizing agents
Reacts with alcohols, amines, aqueous acids and alkalis
Reacts with flammable substances

10.4 Conditions to avoid

Conditions to avoid No further relevant information available.

10.5 Incompatible materials

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

10.6 Hazardous decomposition products

Haz. Decomp. products: Poisonous gases/vapours
Chlorine

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

Acute toxicity

Harmful if swallowed.

LD/LC50 values relevant for classification:

CAS: 7778-54-3 calcium hypochlorite

Oral	LD50	850	mg/kg	rat
Dermal	LD50	>2,000	mg/kg	rabbit
Inhalative	LD50	1,300	mg/cm ³	rat

Primary irritant effect:

Skin contact Causes severe skin burns and eye damage.

Eye contact Causes severe skin burns and eye damage.

Sensitisation: Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

12. Ecological Information**12.1 Toxicity**

Aquatic toxicity:

CAS: 7778-54-3 calcium hypochlorite

Oral	LC50	96 hrs	0.088	mg/l	(bluegill sunfish)
			0.16	mg/l	(rainbow trout)
		48 hrs	0.11	mg/l	(daphnia magna)

12.2 Persistence and degradability

Degradability Anorganic product, is not eliminable from water by means of biological cleaning processes.

12.3 Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4 Mobility in soil

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Very toxic for fish

Additional ecological information:

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

12. Ecological Information

Must not reach sewage water or drainage ditch undiluted or unneutralised.
 Danger to drinking water if even small quantities leak into the ground.
 Very toxic for aquatic organisms

12.5 Results of PBT and PvB :

PBT and PvB : Not applicable

12.6 Other adverse effects

Other adverse effects No further relevant information available

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

ADR, IMDG, IATA UN1748

14.2 UN proper shipping name

ADR: 1748 CALCIUM HYPOCHLORITE MIXTURE, DRY, ENVIRONMENTALLY HAZARDOUS
 IMDG: CALCIUM HYPOCHLORITE MIXTURE, DRY, MARINE POLLUTANT
 IATA: CALCIUM HYPOCHLORITE MIXTURE, DRY

14.3 Transport hazard class(es)

ADR, IMDG, IATA
 Class 5.1 (O2) Oxidising substances.
 Label 5.1



14.4 Packaging Group

ADR, IMDG, IATA III

14. Transport Information**14.5 Environmental hazards**

Environmentally Hazardous	Yes
Marine Pollutant	Yes
	Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)

14.6 Special precautions for user

Danger code (Kemler):	50
EmS	F-H,S-Q
Segregation groups	Hypochlorites
Stowage Code	SW1 SW11
	Protected from sources of heat. Cargo transport units shall be shaded from direct sunlight. Packages in cargo transport units shall be stowed so as to allow for adequate air circulation throughout the cargo.
Segregation Code	SG35 SG38 SG49 SG53
	Stow "separated from" SGG1-acids Stow "separated from" SGG2-ammonium compounds Stow "separated from" SGG6-cyanides Stow "separated from" liquid organic substances

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

Not applicable

Transport/Additional information:

ADR	
Excepted quantities (EQ):	E1
Limited quantities (LQ)	5kg
Excepted quantities (EQ) Code:	E1
	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5kg
Excepted quantities (EQ) Code:	E1
	Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
UN "Model Regulation":	UN1748 CALCIUM HYPOCHLORITE MIXTURE, DRY, 5.1, III, ENVIRONMENTALLY HAZARDOUS

15. Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

Seveso category

P8 OXIDISING LIQUIDS AND SOLIDS

E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

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

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█ Indicates updated section