

**Chlorine Tablets 20g / 200g**

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

- 1.1 Product Identifier** Trichloroisocyanuric acid / syclosene
- 1.2 Relevant Identified uses of the substance or mixture and uses advised against**  
Uses: For disinfection of pool and spa 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](mailto: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. 3	H272
Acute Tox. 4 *	H302
Eye Irrit. 2	H319
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

**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:	Warning
Hazard statements:	H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children P221 Take any precaution to avoid mixing with combustibles. P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P405 Store locked up. P501: Dispose of contents/container in accordance with local/ regional / national/ international regulations.
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Hazard-determining components of labelling: Trichloroisocyanuric Acid

Trade Name: Chlorine Tablets

## 2. Hazard Identification

Additional information: EUH031 Contact with acids liberates toxic gas.  
Warning! Do not use together with other products. May release dangerous gases (chlorine).

**2.3 Other Hazards** Results of PBT and vPvB assessment Not applicable.

## 3. Composition/information on ingredients

**3.2 Chemical nature:** Mixture of substances listed below with nonhazardous additions.

CAS-No.	EINECS	Index-No.	%	
<i>trichloroisocyanuric acid</i>				
87-90-1	201-782-8	613-031-00-5	75 - 100	Ox. Sol. 2, H272; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335
<i>Boric Acid</i>				
10043-35-3	233-139-2	005-007-00-2	0.5-1%	Repr. 1B, H360FD
Index number: 005-007-00-2				Reg.nr.: 01-2119486683-25-xxxx 01-2119486683-25-0029

### SVHC

10043-35-3 boric acid

Additional information: For the wording of the listed hazard phrases refer to section 16.

## 4. First Aid measures

### 4.1 Description of first aid measures

General Advice: Symptoms of poisoning may even occur after several hours; therefore medical observation for at

If inhaled: : Supply fresh air; consult doctor in case of complaints.

In case of skin contact: Seek medical treatment

In case of eye contact: Call a doctor immediately. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

If swallowed: Rinse out mouth and then drink plenty of water. Call for a doctor immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms & effects: No further relevant information available.

### 4.3 Indication of immediate medical attention and special treatment needed

Treatment No further relevant information available.

## 5. Fire fighting measures

### 5.1 Extinguishing media:

Suitable media: Water, Water spray and Carbon dioxide.

Unsuitable media: Extinguishing powder, Foam, Water with full jet.

### 5.2 Special hazards arising from the substance or mixture

Specific Hazards : Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released: Nitrogen oxides (NOx) ; Hydrogen chloride (HCl)

### 5.3 Advice for fire-fighters

Protective equipment Wear self-contained respiratory protective device. Wear fully protective suit. Mouth respiratory protective device.

Further Information: Cool endangered receptacles with water spray. Collect contaminated fire fighting water separately. It must not enter the sewage system

## 6. Accidental release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions: Avoid formation of dust. Ensure adequate ventilation. Mount respiratory protective device.

### 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 or sewage system.  
Do not allow to enter sewers/ surface or ground water.

### 6.3 Methods and materials for containment and cleaning up

Cleaning up: 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

Advice on safe handling: Store in cool, dry place in tightly closed receptacles.  
Provide suction extractors if dust is formed.  
Restrict the quantity stored at the work place.  
Do not refill residue into storage receptacles.

**Information about fire - and explosion protection:** Keep respiratory protective device available.

### 7.2 Conditions for safe storage, including any incompatibilities.

Storage areas : Storage areas :  
Common storage: Do not store together with acids.  
Further information: Protect from humidity and water.  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.  
Storage class: 5.1B

### 7.3 Specific end uses

Specific use(s) No further relevant information available.

## 8. Exposure control/personal protection

**Additional information about design of technical facilities:** No further data; see item 7.

### 8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.  
Additional information: The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Personal protective equipment:

Protective and hygienic 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.  
Avoid contact with the eyes and skin.

## 8. Exposure control/personal protection

### 8.2 Exposure controls

Respiratory protection: Use suitable respiratory protective device when high concentrations are present. 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.

**Protection of hands:** Wear suitable chemical resistant gloves  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### **Material of gloves**

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR	Chloroprene rubber, CR	Butyl rubber, BR
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Eye protection: Tightly sealed goggles

Body protection: Protective work clothing, Boots, Apron

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### **General Information**

Form	Tablets
Colour:	White
Odour:	Like chlorine
Odour threshold:	Not determined.
pH-value (10 g/l) at 20 °C: "	2.0-2.7
Melting point/Melting range:	225-240 °C
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid gaseous):	Undetermined.
Decomposition temperature:	225 °C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower / Upper:	Not determined.
Vapour pressure:	Not applicable.
Density at 20 °C:	ca. 2.5 g/cm <sup>3</sup>
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.
Solubility in / Miscibility with water at 25 °C:	12 g/l
Partition coefficient (n-octanol/water):	Not determined.
Solvent content:	0.00%
Solids content:	100.00%

### 9.2 Other Information

Other information No further relevant information available.

**10. Stability and reactivity****10.1 Reactivity**

Reactivity No further relevant information available.

**10.2 Chemical stability**

Chemical stability To avoid thermal decomposition do not overheat.

**10.3 Possibility of hazardous reactions**

Hazardous reactions: Reacts with oxidising agents.  
Reacts with strong alkali.  
Reacts with amines.  
Strong exothermic reaction with acids.  
Reacts with flammable substances.  
Reacts with acids releasing chlorine.  
Reacts with reducing agents.

**10.4 Conditions to avoid**

Conditions to avoid No further relevant information available.

**10.5 Incompatible materials**

Materials to avoid No further relevant information available.

**10.6 Hazardous decomposition products**

Haz. Decomp. products: Hydrogen chloride (HCl)  
Chlorine  
Nitrogen oxides (NO<sub>x</sub>)

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

**Acute toxicity** Harmful if swallowed

*LD/LC50 values relevant for classification*

<i>trichloroisocyanuric acid</i>				<i>87-90-1</i>	
Route	Species	Test	Value	Units	
Oral	Rat	LD50	406	mg/kg	
<i>boric acid</i>				<i>10043-35-3</i>	
Oral	Rat	LD50	2660	mg/kg	

**Primary Irritant effect:**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.  
Serious eye damage/irritation: Causes serious eye irritation.  
Respiratory or skin 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: May cause respiratory irritation.  
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****Acute Toxicity**

<i>trichloroisocyanuric acid</i>		<b>87-90-1</b>	
Species	Test	Value	Units
Daphnia	EC50	0.2	mg / l
(Selenastrum capricornutum (G	EC50	0.5	mg / l
(Danio rerio (Zebrafärbli))	LC50	0.3	mg / l
<i>boric acid</i>		<b>10043-35-3</b>	
(Chlorella pyrenoidosa)	NOEC	10	mg / l
Daphnia	LC50	133	mg / l

(Modified method based on the ASTM method E645-85)

(ASTM Standard E 729-80)

**12.2 Persistence and degradability**

Persistence and degradability No further relevant information available.

**12.3 Bioaccumulative potential**

Bioaccumulative potential No further relevant information available.

**12.4 Mobility in soil**

Mobility in soil No further relevant information available.

Ecotoxicological effects: Remark: Very toxic for fish

Behaviour in sewage processing plants

10043-35-3 boric acid

NOEC 180 mg/l (Activated sludge) (OECD "Chironomid testing using spiked sediment")

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

**12.5 Results of PBT and PvB assessment**

Results of 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**

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

Empty contaminated packaging thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleaned are to be disposed of in the same manner as the product.

**Recommended cleansing agents:**

Water, if necessary together with cleansing agents.

## 14. Transport Information

14.1 UN Number UN1479

## 14.2 UN proper shipping name

ADR: 1479 OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), ENVIRONMENTALLY HAZARDOUS  
 IMDG: OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), MARINE POLLUTANT  
 IATA: OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID)

## 14.3 Transport hazard class(es)

ADR / IMDG



Class: 5.1 Oxidising substances.  
 Label: 5.1

IATA:



Class: 5.1 Oxidising substances.  
 Label: 5.1

## 14.4 Packaging Group

ADR / IMDG / IATA III

## 14.5 Environmental hazards

Marine pollutant: Yes Yes  
 Symbol (fish and tree)  
 Special marking (ADR): Symbol (fish and tree)

## 14.6 Special precautions for user

Special precautions: Warning: Oxidising substances.  
 Danger code (Kemler): 50  
 EMS Number: F-A,S-Q  
 Stowage Category B  
 Segregation Code SG38 Stow "separated from" ammonium compounds.  
 SG49 Stow "separated from" cyanides  
 SG60 Stow "separated from" peroxides  
 SG61 Stow "separated from" powdered metals

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) 5 kg  
 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) 5 kg  
 Excepted quantities (EQ) Code: E1  
 Maximum net quantity per inner packaging: 30 g  
 Maximum net quantity per outer packaging: 1000 g

UN "Model Regulation": UN1479 OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), 5.1, III,

## 15. Regulatory information

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

#### Directive 2012/18/EU

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

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 30

#### National regulations:

Other regulations, limitations and prohibitive regulations

#### Substances of very high concern (SVHC) according to REACH, Articles 57

10043-35-3 boric acid

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

## 16. Other information

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

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

#### Further information

Restricted to professional users. Attention - Avoid exposure- obtain special instructions before use

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.

Indicates updated section.