

# SAFETY DATA SHEET Revision 8

# Chlorine Tablets 20g / 200g

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

**1.1 Product Identifier** Trichloroisocyanuric acid / symclosene

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

1.4 Emergency Telephone

Tel: +44 (0) 8712 229081 (office hours) +44 (0) 3712 229084 (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
Ox. Sol. 3
Hazard Statements
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.

 ${\tt P301+P312} \ {\tt IF} \ {\tt SWALLOWED: Call} \ {\tt a} \ {\tt POISON} \ {\tt CENTER/doctor} \ {\tt if} \ {\tt you} \ {\tt feel} \ {\tt unwell}.$ 

P305+351+338 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.

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. %

trichloroisocyanuric acid

Ox. Sol. 2, H272; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute 201-782-8 613-031-00-5 87-90-1

75 - 100 Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335

Boric Acid

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

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

least 48 hours after the accident

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

Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If

In case of skin contact: large areas of the skin is damaged or if irritation persists seek medical attention

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

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

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

Protective equipment protective device.

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Cool endangered receptacles with water spray. Collect contaminated fire fighting water

Further Information: separately. It must not enter the sewage system

Trade Name: Chlorine Tablets

#### 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.

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Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Trade Name: Chlorine Tablets

#### 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 selfcontained 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 trough 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

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:

Density at 20 °C:

Relative density

Vapour density

Vapour density

Evaporation rate

Not applicable.

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%
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#### 9.2 Other Information

Other information No further relevant information available.

Trade Name: Chlorine Tablets

# 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 (NOx)

#### 11. Toxicilogical Information

# 11.1 Information on toxicilogical effects

Acute toxicity Harmful if swallowed

LD/LC50 values relevant for classification

trichloroisocyanuric acid				87-90-1	
Route	Species	Test	Value	Units	
Oral	Rat	LD50	406	mg/kg	
boric acid	boric acid 10043-35-3				
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 (carcinogenity, 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.

Trade Name:

**Chlorine Tablets** 

#### 12. Ecological Information

#### 12.1 Toxicity

### **Acute Toxicity**

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

(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 Bioaccumlative potential

Bioaccumlative potential No further relevant information available.

#### 12.4 Mobility in soil

Mobility in soil No further relevant information available.

Ecotoxical 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 packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

# Recommended cleansing agents:

Trade Name: Chlorine Tablets

# 14. Transport Information

**14.1 UN Number** UN2468

14.2 UN proper shipping name

UN 2468, Trichloroisocyanuric Acid, Dry, 5.1, PG II, (E), MARINE

POLLUTANT/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 II

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 Retgeuārdft per outer packaging: 1000 g

#### Trade Name:

#### **Chlorine Tablets**

# 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.