



SAFETY DATA SHEET

Chlorine Tablets 20g/200g - Trichloroisocyanuric acid (Trichlor)

1.1 Product Identifier

Trade Name: Chlorine Tablets 20g/200g

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: Deep Blue Pool Supplies

Box 8899 Hermitage,

Corsham, SN13 8DT

Telephone: +44 (0) 3330 907094

Fax: +44 (0) 3330 907094

E-mail: help@deepbluepoolsupplies.co.uk

1.4 Emergency Telephone

Tel: +44 (0) 3330 907094 (office hours)

Tel: 111 (Out of 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

STOT SE 3 H400

Aquatic Acute 1 H410

Aquatic Chronic 1

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:



GHS07

GHS09

GHS10

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 or doctor/physician 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 legislation

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

Hazardous components which must be listed on the label :

Trichloroisocyanuric Acid

2.3 Other Hazards

PBT / vPvB: 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			
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

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: Take off all contaminated clothing immediately.

If inhaled:

Move to fresh air. Remove contaminated clothing and loosen remaining clothing. Keep at rest until fully recovered. If breathing is laboured and patient cyanotic (blue), ensure airways are clear and have qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In event of cardiac arrest, apply external cardiac massage. Seek medical advice. In severe cases pulmonary oedema can be delayed by up to 48 hours.

In case of skin contact: Drench the skin with plenty of water. Remove contaminated clothing and wash before reuse. If large areas of the skin is damaged or if irritation persists seek medical attention.

In case of eye contact: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Get medical attention.

If swallowed: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

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

Symptoms & Effects: No further information available.

4.3 Indication of immediate medical attention and special treatment needed:

Treatment Treat Symptomatically.

5. Fire fighting measures

5.1 Extinguishing media:

Suitable media: Water spray or fog (large quantities available)

Unsuitable media: No information available

5.2 Special hazards arising from the substance or mixture

Specific Hazards: Oxidising agent. Not combustible, but will support combustion of other materials.
May produce toxic fumes of CO, CO₂ and HCl if burning.

5.3 Advice for fire-fighters:

Protective equipment:

Fire-fighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Thoroughly decontaminate fire-fighting equipment including all fire fighters wearing apparel after the incident.

Further Information: Collect contaminated fire extinguishing water separately.

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Use personal protective equipment. Provide adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions:

Environmental precautions: Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Inform respective authorities about pollution to water sources.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up:

Cleaning up:

Sweep up, avoiding generation of dust, then immediately spread as a thin layer in an uncontaminated, dry open area, to avoid the possibility of hot spots forming. Gradually hose to drain ensuring large dilution. DO NOT store or transport swept up material. DO NOT return spilled material to original container. Do not add small amount of water to material. Where a spill has occurred in a confined space or an unventilated building and the material is damp and evolving chlorine, the rate of chlorine evolution can be reduced by covering the thinly spread solid with soda ash. For large spills notify Emergency Services.

6.4 Reference to other sections

For personal protection see section 8

7. Handling and storage

7.1 Precautions for safe handling:

Advice on safe handling:

Strong oxidising agent. DO NOT MIX WITH OTHER CHEMICALS. Mix only with water. Never add water to product. Always add product to water. Use clean dry dispensing equipment. Avoid contact with skin and eyes.

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.

7.2 Conditions for safe storage, including any incompatibilities.

Storage: Keep this product in original, sealed container when not in use. Store in a cool, dry place.

Protection against fire: Normal measures for preventive fire protection

Further information: Keep away from children

Common storage: Keep away from food, drink and animal feeding stuffs. Keep away from combustible material

7.3 Specific end uses

Specific use(s) No information is available.

8. Exposure control/personal protection

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

Engineering measures: Fume cupboard required when vapours/aerosol are generated. Refer to protective measures listed in sections 7 and 8.

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.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device Filter AB2P2. Filter AB2P3. In case of intensive or longer exposure use self-contained respiratory protective device
Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU

Directive Hand protection:

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

Eye protection: Wear tightly sealed goggles

Skin and body protection: Wear appropriate clothing to prevent repeated or prolonged contact, boots and apron.

Environmental exposure controls: Dispose of in accordance with all applicable local and national regulations.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

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/cm³

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 No further information

10. Stability and reactivity

10.1 Reactivity:

Reactivity: No 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:

No information available.

10.5 Incompatible materials:

Materials to avoid:

No information available.

10.6 Hazardous decomposition products

Haz. Decomp. products:

Hydrogen chloride (HCl)

Chlorine

Nitrogen oxides (NOx)

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity: Harmful if swallowed

LD/LC50 values relevant for classification

Name	Route	Species	Test	Value	Units
trichloroisocyanuric acid	Oral	Rat	LD50	>406	mg/kg
Boric acid	Oral	Human	LD50	2,660	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:

Highly toxic to aquatic life: DO NOT discharge into lakes, ponds or streams. DO NOT discharge into public waters unless in accordance with consent to discharge orders.

Species	Time	Test	Value	Units
Fish	96H	LC50	1,000	Mg/L
Daphna magna	48h	LC50	1,000	Mg/L

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. 12.6 Other adverse effects:.

13. Disposal Considerations

13.1 Waste treatment methods:

Product:

Disposal together with normal waste is not allowed. Special disposal is required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated packaging:

Empty contaminated packaging thoroughly. They can be re-cycled after thorough and proper cleaning. Packaging that cannot be cleaned is to be disposed of in the same manner as the product

Waste Catalogue No:

No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

14. Transport Information

14.1 UN Number

1479

14.2 UN proper shipping name

1479 OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), ENVIRONMENTALLY HAZARDOUS

14.3 Transport hazard class(es)

ADR / IMDG

Class: 5.1 Oxidising substances.

Label: 5.1

IATA:

Class: 5.1 Oxidising

Label: 5.1

14.4 Packaging Group

III

14.5 Environmental hazards

Marine Pollutant Yes

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

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":

1479 OXIDIZING SOLID, N.O.S. (TRICHLOROISOCYANURIC ACID), ENVIRONMENTALLY HAZARDOUS
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.

Recommended for 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.