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## SAFETY DATA SHEET

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### 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product Name:	<b>Multifunctional Tablets</b>
Datasheet Number:	SP131/132 1. 1. 0
Product Part Number:	SP131/132
Chemical Name:	Trichloroisocyanuric acid/Copper Sulphate/Aluminum Sulphate

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Pool / spa treatment

#### 1.3 Details of the supplier of the safety data sheet

Name of Supplier:	Total Pool Chemicals Ltd
Address of Supplier:	Unit 1, Pool Bank Business Park High Street, Tarvin Chester CH3 8JH UK
Telephone:	+44 (0)1829 740290
Fax:	+44 (0)1829 741855
Responsible Person:	Steve Carder
Email:	sales@totalpool.co.uk

#### 1.4 Emergency telephone number

+44 (0)1829 740290 (Office Hours)

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## 2 Hazards identification

### 2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Ox. Sol. 2, H272
- Acute Tox. 4, H302
- Eye Irrit. 2, H319
- STOT SE 3, H335
- Aquatic Acute 1, H400
- Aquatic Chronic 1, H410
- EUH031
- Classification (67/548/EEC, 1999/45/EC)
- O; R8
- Xn; R22
- Xi; R36/37
- R31
- N; R50/53
- Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

### 2.2 Label elements



## 2 Hazards identification (....)



- Signal Word: Danger
- Symbols: GHS03, GHS07, GHS09

### Hazard phrases

- May intensify fire; oxidizer.
- Harmful if swallowed.
- Causes serious eye irritation.
- May cause respiratory irritation.
- Very toxic to aquatic life with long lasting effects.
- Contact with acids liberates toxic gas.
- Warning! Do not use together with other products. May release dangerous gases (chlorine).

### Precautionary Phrases

- Store locked up/Keep out of reach of children.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- In case of fire: Do not breathe dust/fume/gas/mist/vapours/spray.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Avoid release to the environment.

### 2.3 Other hazards

- Marine pollutant

## 3 Composition/information on ingredients

### 3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols	Index No.
Trichloroisocyanuric acid	97%	87-90-1	201-782-8	H272, H302, H319, H335, H400, H410 R8, R22, R31, R36/37, R50/53	GHS03, GHS07, GHS09 O, Xn, N	613-031-00-5
Copper sulphate pentahydrate	1%	7758-99-8	231-847-6	H302, H319, H315, H400, H410, R22, R36/38, R50/53	GHS07, GHS09, Xn, N	029-004-00-0
Aluminium sulphate	1%	10043-01-3	233-135-0	H319, H335, H315, R36/37/38	GHS07, Xi	

\*See Section 16



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## 4 First aid measures

### 4.1 Description of first aid measures

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If breathing is difficult, oxygen should be given by a trained person
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash with plenty of soap and water.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Get immediate medical advice/attention.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Give water or milk to drink
- Do NOT induce vomiting.
- Mucosal damage may contraindicate the use of gastric lavage

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

- Can cause damage to the eyes
- Can cause damage to the skin
- In cases of severe exposure, breathing difficulty may develop
- In cases of severe exposure, gastro-intestinal disturbances may develop

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

- Treat symptomatically

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## 5 Fire-fighting measures

### 5.1 Extinguishing media

- In case of fire: use water for extinction
- DO NOT USE dry extinguishers containing ammonium compounds such as dry powder.

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

- See Section 10.6
- Oxidising and Harmful

### 5.3 Advice for firefighters

- Wear protective clothing as per section 8
- In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
- Wear full protective clothing including chemical protection suit

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## 6 Accidental release measures

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

- Avoid raising dust
- Wear protective clothing as per section 8
- Contact with water may form explosive gases
- Evacuate the area and keep personnel upwind

### 6.2 Environmental Precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities



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## 6 Accidental release measures (....)

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

- Collect as much as possible in clean container for reuse or disposal
- Do not absorb spillage in sawdust or other combustible material
- Seek expert advice for removal and disposal of all contaminated materials and wastes

### 6.4 Reference to other sections

- See Section 7 & 8

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## 7 Handling and storage

### 7.1 Precautions for safe handling

- Avoid raising dust
- Ensure adequate ventilation
- Avoid contact with combustible material
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.

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

- Store away from other materials.
- Keep/Store away from clothing/.../combustible materials.
- Store in a dry place. Store in a closed container.
- Store in a well-ventilated place. Keep cool.
- Do not store above 25 °C
- Keep only in original container.
- Protect from moisture.

### 7.3 Specific end use(s)

- No information available.

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## 8 Exposure controls/personal protection

### 8.1 Control parameters

#### Trichloroisocyanuric acid

- WEL (long term) 0.5 ppm
- WEL (long term) 1.5 mg/m<sup>3</sup>
- WEL (short term) 1 ppm
- WEL (short term) 2.9 mg/m<sup>3</sup>

### 8.2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

#### Occupational exposure controls

- In case of inadequate ventilation wear respiratory protection.
- Wear suitable protective clothing, including eye/face protection and gloves (butyl rubber are recommended)
- When handling this substance, e.g. sampling, wear goggles giving complete eye protection



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## 8 Exposure controls/personal protection (....)



Respirator



Goggles



Gloves



Suit

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## 9 Physical and chemical properties

### 9 .1 Information on basic physical and chemical properties

- Odour: chlorine
- Appearance: Solid, tablets
- pH 3.5 - 4.5 at 1 % concentration
- Boiling point - not applicable
- Vapour pressure - not applicable
- Vapour density - not applicable
- Melting point 225-230 deg C with decomposition
- Water solubility 30 % at 25 °C
- Specific gravity 1.3 g/cm<sup>3</sup>
- Not flammable but will support combustion
- Oxidising
- Partition coefficient : n-Octanol/water - not known
- Evaporation rate - not known
- Viscosity - not applicable

### 9 .2 Other information

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## 10 Stability and reactivity

### 10 .1 Reactivity

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

### 10 .2 Chemical stability

- Decomposes above 200 °C

### 10 .3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas.

### 10 .4 Conditions to avoid

- Avoid contact with acids and alkalis
- Avoid contact with combustible material
- Avoid contact with foodstuffs
- Avoid contact with reducing agents
- Keep away from heat and sources of ignition
- Avoid contact with moisture

### 10 .5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with reducing agents



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## 10 Stability and reactivity (....)

- Contact with water may form explosive gases
- Contact with acids liberates toxic gas.

### 10 .6 Hazardous Decomposition Products

- Decomposition products may include carbon oxides
- Decomposition products include chlorine.
- Decomposition products may include hydrogen chloride

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## 11 Toxicological information

### 11 .1 Information on toxicological effects

- LD50 (oral, rat) 809 mg/kg
- LD50 (skin, rabbit) 7600 mg/kg
- Irritation to eyes (rabbit) : Corrosive
- Irritation to skin (rabbit) : Moderate

#### Inhalation

- May cause dizziness
- Causes coughing
- Can cause damage to the mucous membranes
- In cases of severe exposure, burning sensation may develop
- In cases of severe exposure, delayed pulmonary oedema may develop

#### Contact with skin

- May cause irritation
- In cases of severe exposure, burning sensation may develop
- In cases of severe exposure, dermatitis may develop

#### Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

#### Ingestion

- The ingestion of significant quantities may cause damage to digestive system
- The ingestion of significant quantities may cause burning sensation

#### Carcinogenicity

- No evidence of carcinogenic effects

#### Teratogenicity

- No information available

#### Mutagenicity

- No information available

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## 12 Ecological information

### 12 .1 Toxicity

- Very toxic to aquatic life with long lasting effects.
- LC50 (bluegill sunfish) 0.20-0.40 mg/l (96 hr)
- LC50 (rainbow trout) 0.08-0.37 mg/l (96 hr)



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## 12 Ecological information (....)

- IC50 (algae) <0.5 mg/l (3 hr)

### 12 .2 Persistence and degradability

- Biodegradable
- Degrades by hydrolysis
- Half life under acidic conditions is 8 hours

### 12 .3 Bioaccumulation Potential

- Bioaccumulation is insignificant

### 12 .4 Mobility in soil

- Decomposes in water
- Large volumes may penetrate soil and contaminate groundwater
- Marine pollutant

### 12 .5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

### 12 .6 Other Adverse Effects

- No information available

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## 13 Disposal considerations

### 13 .1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation
- Do not reuse empty containers
- Uncontaminated material may be returnable. Contact supplier

#### Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

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## 14 Transport information



Oxidizing Agent    Marine Pollutant

### 14.1 UN Number

2468

### 14.2 UN Proper Shipping Name

Trichloroisocyanuric acid, dry mixture

### 14.3 Transport hazard class(es)

5.1

### 14.4 Packing group

II



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## 14 Transport information (....)

### 14 .5 Environmental hazards

- Marine pollutant

### 14 .6 Special precautions for user

- See Section 7

### 14 .7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

#### Other information

##### Road/Rail (ADR/RID)

Proper Shipping Name:	Trichloroisocyanuric acid, dry mixture		
ADR UN No.:	2468		
ADR Hazard Class:	5.1	ADR Packing Group:	II
Tunnel Code:	E		

##### Sea (IMDG)

Proper Shipping Name:	Trichloroisocyanuric acid, dry mixture		
IMDG UN No.:	2468		
IMDG Hazard Class.:	5.1	IMDG Pack Group.:	II

##### Air (ICAO/IATA)

Proper Shipping Name:	Trichloroisocyanuric acid, dry mixture		
ICAO Un No.:	2468		
ICAO Hazard Class.:	5.1	ICAO Packing Group.:	II

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## 15 Regulatory information

### 15 .1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Refer to current ADR Regulations
- Refer to current CPL Regulations
- Refer to current EC Directive 82/501/EEC (the Seveso Directive)
- The List of Wastes (England) Regulations 2005 apply in the UK

### 15 .2 Chemical Safety Assessment

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## 16 Other information

Text of R and S phrase codes used in this safety data sheet:- H272: May intensify fire; oxidizer.; H302: Harmful if swallowed.; H315: Causes skin irritation.; 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.; R22: Harmful if swallowed; R31: Contact with acids liberates toxic gas; R36/37: Irritating to eyes and respiratory system; R36/37/38: Irritating to eyes, respiratory system and skin; R36/38: Irritating to eyes and skin; R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment; R8: Contact with combustible material may cause fire.

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.