

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

- **Product details**
- **Trade name:** Lo-Chlor Winteriser Copper Free
- **Application of the substance / the preparation** All seasons swimming pool algaecide
- **Manufacturer/Supplier:**  
Total Water Products  
Alrewas House  
Main Street  
Alrewas  
Burton on Trent  
Staffordshire  
DE13 7ED  
UK  
  
Tel: (0044) 1283 792600  
Fax No: (0044) 1283 792041  
e-mail: technical@totalwaterproducts.co.uk
- **Further information obtainable from:** Product safety department.
- **Information in case of emergency:** Tel: (0044) 1283 792600

## 2 Hazards identification

- **Hazard description:**





N Dangerous for the environment

- **Information concerning particular hazards for human and environment:**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Classification system:**  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

## 3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

25988-97-0	Polyquaternary ammonium compound	 N; R 50/53	2.5-10%
2809-21-4	1-Hydroxyethylidene-1, 1-diphosphonic acid	 C; R 34-41	≤ 2.5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**  
Immediately rinse with water.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 2)

# Safety Data Sheet

## according to 1907/2006/EC, Article 31

Printing date 29.09.2009

Revision: 25.06.2009

**Trade name: Lo-Chlor Winteriser Copper Free**

(Contd. of page 1)

- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Seek immediate medical advice.
- **Information for doctor:** Treat symptomatically and supportively.

### 5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear fully protective suit.  
Wear self-contained respiratory protective device.

### 6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Do not allow to penetrate the ground/soil.  
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.

### 7 Handling and storage

- **Handling:**
- **Information for safe handling:**  
Prevent formation of aerosols.  
Ensure good ventilation/exhaustion at the workplace.  
Do not mix with other products in the concentrated form.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
Protect from frost.  
Store in cool, dry conditions in well sealed receptacles.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**  
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.
- **Personal protective equipment:**  
Select PPE appropriate for the operations taking place taking into account the product properties.
- **General protective and hygienic measures:**  
Do not eat, drink, smoke or sniff while working.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.
- **Respiratory protection:** Not required.

(Contd. on page 3)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 29.09.2009

Revision: 25.06.2009

**Trade name: Lo-Chlor Winteriser Copper Free**

(Contd. of page 2)

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
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.

· **Eye protection:**

Safety glasses  
Goggles recommended during refilling

· **Body protection:** Impervious protective clothing

## 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Liquid
<b>Colour:</b>	Colourless
<b>Odour:</b>	Mild

· **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Undetermined.

· **Flash point:** Not applicable.

· **Ignition temperature:** >250°C

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure at 20°C:** 23 hPa

· **Density at 20°C:** 1.011-1.051 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Fully miscible.

## 10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· **Materials to be avoided:** Strong acids and oxidising agents

· **Dangerous reactions** No dangerous reactions known.

· **Dangerous decomposition products:**

Carbon monoxide and carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)

GB

(Contd. on page 4)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 29.09.2009

Revision: 25.06.2009

Trade name: Lo-Chlor Winteriser Copper Free

(Contd. of page 3)

## 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

<b>25988-97-0 Polyquaternary ammonium compound</b>	
Oral	LD50 >5000 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitization:** No sensitizing effects known.

## 12 Ecological information

- **Behaviour in environmental systems:**

- **Mobility and bioaccumulation potential:** Product is not expected to bioaccumulate.

- **Ecotoxicological effects:**

- **Remark:** Toxic for fish

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

## 13 Disposal considerations

- **Product:**

- **Recommendation**

Contact waste processors for recycling information.

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

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- **European waste catalogue**

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined.

Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- **Uncleaned packaging:**

- **Recommendation:**

Container remains hazardous when empty. Continue to observe all precautions.

Do not mix with other waste streams.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 9 Miscellaneous dangerous substances and articles.

- **UN-Number:** 3082

- **Packaging group:** III

(Contd. on page 5)

# Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 29.09.2009

Revision: 25.06.2009

Trade name: Lo-Chlor Winteriser Copper Free

(Contd. of page 4)

- **Hazard label:** 9
- **Special marking:** Symbol (fish and tree)
- **Description of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

- **Maritime transport IMDG:**



- **IMDG Class:** 9
- **UN Number:** 3082
- **Label:** 9
- **Packaging group:** III
- **EMS Number:** F-A,S-F
- **Marine pollutant:** No
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 9
- **UN/ID Number:** 3082
- **Label:** 9
- **Packaging group:** III
- **Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

- **Environmental hazards:** Copper sulphate
- **Transport/Additional information:** Not dangerous according to the above specifications.

## 15 Regulatory information

- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- **Code letter and hazard designation of product:**  
N Dangerous for the environment
- **Risk phrases:**  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**  
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases**  
34 Causes burns.  
41 Risk of serious damage to eyes.  
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Department issuing MSDS:** Product safety department.

GB