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

1.1 Product Identifier
Aquablanc Active Oxygen Liquid with algeacide

1.2 Relevant Identified uses of the substance or mixture and uses advised against
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) 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

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Hazard Category</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Damage</td>
<td>Category 1</td>
<td>H318</td>
</tr>
<tr>
<td>Acute Environ</td>
<td></td>
<td>H411</td>
</tr>
</tbody>
</table>

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

Signal word: Danger

Hazard statements:
- H318 Causes serious eye damage
- H411 Toxic to aquatic life with long lasting effects

2.3 Other Hazards
Results of PBT and vPvB assessment Not applicable
3. Composition/information on ingredients

3.1 Mixtures
Mixture of the substances listed below with non-hazardous additions

<table>
<thead>
<tr>
<th>Index</th>
<th>CAS No</th>
<th>EINECS</th>
<th>%</th>
<th>CLP Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen peroxide solution</td>
<td>008-003-00-9</td>
<td>7722-84-1</td>
<td>0 - &lt;12%</td>
<td>H271, H314, H302, H332</td>
</tr>
<tr>
<td>Hydrogen peroxide solution</td>
<td>25988-97-0</td>
<td>1 - &lt;2.5%</td>
<td></td>
<td>H400, H410, H302</td>
</tr>
</tbody>
</table>

4. First Aid measures

4.1 Description of first aid measures
**General information:**
Take affected persons out of danger area and lay down.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident

**After inhalation:**
Take affected persons into fresh air and keep quiet. Call a doctor immediately.

**After skin contact:**
Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

**After eye contact:**
Call a doctor immediately.
Rinse opened eye for several minutes under running water. Then consult a doctor. Protect unharmed eye.

4.2 Most important symptoms and effects, both acute and delayed:
No further relevant information available

4.3 Indication of immediate medical attention and special treatment needed
No further relevant information available

5. Fire fighting measures

5.1 Extinguishing media:
**Suitable media:** Water spray; Foam; Fire-extinguishing powder; Carbon dioxide
**Unsuitable media:** Water with full jet

5.2 Special hazards arising from the substance or mixture
No further relevant information available

5.3 Advice for fire-fighters
Wear self-contained respiratory protective device.
Wear fully protective suit.

**Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Trade Name: Aquablanc Active Oxygen Liquid with Algeacide

6. Accidental release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Keep away from ignition sources. Wear protective clothing.

6.2 Environmental precautions
Prevent from spreading (e.g. by damming-in or oil barriers). 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. Dilute with plenty of water. Do not allow to enter sewers / surface or ground water.

6.3 Methods and materials for containment and cleaning up
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

6.4 Reference to 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
Keep away from heat and direct sunlight. Do not refill residue into storage receptacles. Do not seal receptacles gas-tight. Store in cool, dry place in tightly closed receptacles. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about fire and explosion protection: Potentially explosive when mixed with organic substances.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles:
Jointless, smooth floor and walls. Provide acid-resistant floor. Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility:
Store away from reducing agents, metals and flammable substances.

Further information about storage conditions:
Keep container tightly sealed. Storage class: 5.1B

7.3 Specific end uses
No further relevant information available

8. Exposure control/personal protection

8.1 Control parameters
Component: hydrogen peroxide solution
CAS No: 7722-84-1
WEL Short-term value: 2.8 mg/m³ 2 ppm
Long-term value: 1.4 mg/m³ 1 ppm

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Engineering measures Refer to protective measures listed in sections 7 and 8

Personal protective equipment

General protective and hygienic measures:
Be sure to clean skin thoroughly after work and before breaks. 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.

(continued on Page 4)
8. Exposure control/personal protection

Respiratory protection:
Use suitable respiratory protective device only when aerosol or mist is formed.
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:
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/ 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.

For the permanent contact gloves made of the following materials are suitable: Natural rubber, NR
Not suitable are gloves made of the following materials: Leather gloves, Strong material gloves

Eye protection
Wear tightly sealed goggles approved to standard EN 166.

Body protection:
Impervious protective clothing
Boots

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Fluid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH @ 20°C</td>
<td>02-Apr</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Undetermined</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100°C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure at 20 °C</td>
<td>23 hPa</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density @ 20°C</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Self Igniting</td>
<td>Product is not self ignition</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product does not present an explosion hazard</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Fully miscible</td>
</tr>
</tbody>
</table>

(continued on Page 5)
## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity Dynamic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity Kinematic</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.00%</td>
</tr>
<tr>
<td>Water</td>
<td>86.40%</td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### 9.2 Other Information

No further information available.

## 10. Stability and reactivity

### 10.1 Reactivity

### 10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Exothermic thermal decomposition.

### 10.3 Possibility of hazardous reactions

- Reacts with reducing agents.
- Reacts with acids, alkalis and oxidising agents.
- Reacts with certain metals.
- Reacts with strong alkali.

### 10.4 Conditions to avoid

No further relevant information available.

### 10.5 Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

Hydrogen and Oxygen

## 11. Toxicological Information

### 11.1 Information on toxicological effects

#### Acute toxicity:

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7722-84-1 hydrogen peroxide solution</td>
<td>Oral: 1193  mg/kg rat</td>
<td>Oral</td>
<td>rat</td>
<td>1193  mg/kg rat</td>
</tr>
<tr>
<td>25988-97-0 Polymeric quaternary ammonium chloride</td>
<td>Inhalative LC50: &gt;0.17 mg/l rat</td>
<td>Inhalative</td>
<td>rat</td>
<td>&gt;0.17 mg/l rat</td>
</tr>
</tbody>
</table>

#### Primary irritant effect:

- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** No sensitising effects known.

#### Oral NOEL

<table>
<thead>
<tr>
<th>Substance</th>
<th>NOEL</th>
<th>Route</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7722-84-1 hydrogen peroxide solution</td>
<td>Oral: 37 mg/kg mouse</td>
<td>Oral</td>
<td>mouse</td>
<td>37 mg/kg mouse</td>
</tr>
</tbody>
</table>

Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
- Harmful
- Irritant
12. Ecological Information

12.1 Toxicity

Acute Toxicity

<table>
<thead>
<tr>
<th>EC50</th>
<th>mg/l</th>
<th>(Selenastrum capricornutum (Grünalge))</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td></td>
<td>(daphnia)</td>
</tr>
<tr>
<td>31.3</td>
<td></td>
<td>(Oncorhynchus mykiss (Regenbogenforelle))</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
No further relevant information

12.3 Bioaccumulative potential
No further relevant information

12.4 Mobility in soil
No further relevant information

Ecotoxic effects:
Remark: Harmful to fish

Additional ecological information:
General notes:
Harmful to aquatic organisms
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...

12.5 Results of PBT and PvB
No further relevant information

12.6 Other adverse effects
No further relevant information

13. Disposal Considerations

13.1 Waste treatment methods
Recommendation
Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

European 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.
### 14. Transport Information

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>14.1 UN Number</strong></td>
<td>UN3139</td>
</tr>
<tr>
<td><strong>14.2 UN proper shipping name</strong></td>
<td>3139 OXIDIZING LIQUID, N.O.S., ENVIRONMENTALLY HAZARDOUS OXIDIZING LIQUID, N.O.S. (Polymer of N-Methylmethanamine (EINECS 204-697-4 with (chloromethyl)-oxirane (EINECS 203-439-8) / Polymeric quaternary ammonium chloride), MARINE POLLUTANT OXIDIZING LIQUID, N.O.S</td>
</tr>
<tr>
<td><strong>14.3 Transport hazard class(es)</strong></td>
<td>ADR, IMDG</td>
</tr>
<tr>
<td><strong>Class</strong></td>
<td>5.1 Oxidising substances</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>5.1</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td>5.1</td>
</tr>
<tr>
<td><strong>ADR, IATA, IMDG</strong></td>
<td>III</td>
</tr>
<tr>
<td><strong>14.4 Packaging Group</strong></td>
<td>III</td>
</tr>
<tr>
<td><strong>14.5 Environmental hazards</strong></td>
<td>Product contains environmentally hazardous substances: Polymer of N-methylmethanamine (EINECS 204-697-4 with (chloromethyl)-oxirane (EINECS 203-439-8) / Polymeric quaternary ammonium chloride</td>
</tr>
<tr>
<td><strong>Marine pollutant:</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Special marking (ADR):</strong></td>
<td>Symbol (fish and tree)</td>
</tr>
<tr>
<td><strong>Special precautions for user</strong></td>
<td>Warning: Oxidising substances.</td>
</tr>
<tr>
<td><strong>Danger code (Kemler):</strong></td>
<td>-</td>
</tr>
<tr>
<td><strong>EMS Number</strong></td>
<td>F-A,S-Q</td>
</tr>
<tr>
<td><strong>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</strong></td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

**Transport/Additional information:**

**ADR**
- Excepted quantities (EQ): E1
- Limited quantities (LQ): 5L
- Excepted quantities (EQ) Code: E1
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 1000 ml
- Transport category: 3
- Tunnel restriction code: E

**IMDG**
- Excepted quantities (EQ) Code: E1
- Maximum net quantity per inner packaging: 30 ml
- Maximum net quantity per outer packaging: 1000 ml

**UN "Model Regulation":** UN3139, OXIDIZING LIQUID, N.O.S., ENVIRONMENTALLY HAZARDOUS, 5.1, III
15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for this substance or mixture.
No further relevant information available

15.2 Chemical Safety Assessment
No further relevant information available

16. Other information

- Relevant phrases
  Full text of H-statements referred to under sections 2 and 3
  H271 May cause fire or explosion; strong oxidiser.
  H302 Harmful if swallowed.
  H314 Causes severe skin burns and eye damage.
  H332 Harmful if inhaled.
  H400 Very toxic to aquatic life.
  H410 Very toxic to aquatic life with long lasting effects.

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.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuse par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  IATA-DGR: Dangerous goods Regulations by the 'International Air Transport Association' (IATA)
  ICAO: International Civil Aviation Organization
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances.
  CAS: Chemicals Abstracts Service (division of the American Chemical Society)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent

Rev 3
Indicates updated section