

**Huwa-san TR50**

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

**1.1 Product Identifier**                      Huwa-san TR50  
 Chemical:                                      Stabilised hydrogen peroxide

**1.2 Relevant uses**                              Disinfectant

**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](mailto: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   | Hazard Category | Hazard Statements |
|----------------|-----------------|-------------------|
| Ox. Liq.       | 1               | H271              |
| Acute. Tox     | 4               | H302              |
| Skin Corrosion | 1A              | H314              |
| Acute. Tox     | 4               | H332              |
| STOT SE        | 3               | H335              |

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 toxicological information.  
 Potential environmental effects:                              See section 12 for toxicological information.

**2.2 Label elements**

**Labelling according to Regulation (EC) No 1272/2008**

Hazard pictograms:                              GHS03: Oxidising  
                                                                  GHS05: Corrosion  
                                                                  GHS07: Warning

Hazard symbols:                                

Signal word:                                      Danger

Hazard statements:                              H271                              May cause fire or explosion; strong oxidizer  
                                                                  H302                              Harmful if swallowed.  
                                                                  H314                              Causes severe skin burns and eye damage  
                                                                  H332                              Harmful if inhaled  
                                                                  H335                              May cause respiratory irritation

Precautionary statements: P280                              Wear protective gloves/protective clothing/eye protection/ face protection  
                                                                  P260                              Do not breath dust/fume/gas/mist/vapours/spray

**2. Hazard Identification...cont**

|                    |                                                                                                                                  |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P301+330+331       | IF SWALLOWED: rinse mouth. Do NOT induce vomiting.                                                                               |
| P303 + P361 + P353 | IF ON SKIN ( or hair ) :Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.                     |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P405               | Store locked up.                                                                                                                 |

**2.3 Other Hazards** For Results of PBT and vPvB assessment see section 12.5.

**3. Composition/information on ingredients**

**3.1 Mixture** A mixture of the substances listed below with non-hazardous additions

| Index-No.                | CAS-No.   | EC-No.      | %     | CLP Phrases                                                                          |
|--------------------------|-----------|-------------|-------|--------------------------------------------------------------------------------------|
| <i>Hydrogen peroxide</i> |           |             |       |                                                                                      |
| 016-020-00-8             | 231-765-0 | 007722-84-1 | 49.7% | Ox. Liq.1 H271; Acute.Tox4 H302; Skin Corr 1A H314; Acute Tox 4 H332; STOT SE 3 H335 |

**4. First Aid measures****4.1 Description of first aid measures**

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Advice:          | Take off all contaminated clothing immediately.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| If inhaled:              | Highly unlikely to be inhaled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| In case of skin contact: | Wash off immediately with plenty of water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| In case of eye contact:  | With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. In case of lasting pain or discomfort consult an oculist.                                                                                                                                                                                                                                                                                                                                                                                                                              |
| If swallowed:            | The casualty can gasp for breath and loose consciousness, if so call the emergency services. Do not let the casualty drink. Do not induce vomiting. Remove victim immediately from source of exposure. Put the casualty on his side, the head somewhat lower. Keep the trachea free: chin and tongue down, remove possible vomit. Insufflate the victim. If the casualty is conscious: let them drink some water. Do not induce vomiting. Put the casualty straight up permitting to set free the releasing oxygen from the stomach. Do not administer bicarbonates (salt solutions). |

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

Symptoms and effects: See Section 11 for more detailed information on health effects and symptoms

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

Advice for the Doctor Do not induce vomiting, no stomach pumping, endoscopy.  
Let them drink water to dilute the product, do not administer bicarbonates or salt  
In case of foaming, intubate immediately, it can prevent severe respiration difficulties  
Insert a nasogastric tube to set free the releasing oxygen from the stomach.  
Use stomachic medication, RX lungs

## 5. Fire fighting measures

### 5.1 Extinguishing media:

Suitable media: Water and quenching foam  
Unsuitable media: Quenching powder, carbon dioxide

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

During fire fighting: The product is incombustible  
During fire: Involved in fire: it may decompose yielding oxygen. The release of oxygen supports combustion

### 5.3 Advice for fire-fighters

Protective equipment: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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.  
Avoid contact with skin and eyes. Do not breath vapours or spray mist.  
For personal protection see section 8.

### 6.2 Environmental precautions

Environmental precautions: Collect, dam up product with sand or earth. Do not use: combustible substances, saw dust, cloth. Keep hydrogen peroxide away from incompatible substances: see Section 10

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

Methods for clearing up: Do not permit to enter undiluted into drainage systems or soil. Clean contaminated surfaces with an excess of water: see section 13

Further information: Never return spilt product to original container for recycling purposes.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on personal protective equipment.  
See Section 13 for waste treatment information

## 7. Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling: The usual precautionary measures for dealing with chemicals should be observed.  
Protect from impurities and heat effect.  
Never return spilt product to original container for recycling purposes.  
Wear suitable gloves: see Section 8.3. Avoid contact with skin, eyes and clothing  
Do not inhale aerosols  
Change work clothes that have been moistened or saturated with the product.  
Wash contaminated clothing with plenty of water.  
Protect from heat  
Keep away from incompatible substances: see Section 10  
Keep away from sources of ignition

**7. Handling and storage****7.2 Conditions for safe storage, including any incompatibilities.**

|            |                                                                                                                                                                                                                                                                                                                                                                                  |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage    | Cool, clean, incombustible, lockable, jointless, smooth concrete floor                                                                                                                                                                                                                                                                                                           |
| Containers | For transport and stock only use suitable materials: specific stainless steel, pure aluminium, certain aluminium magnesium alloys, polyethylene material (HDPE)<br>Use adequate venting devices on all packages and containers<br>Do not empty container by means of pressure.<br>Do not store together with alkalis, reducing agents, metallic salts and combustible substances |

**7.3 Specific end uses** No information is available.

**8. Exposure control/personal protection****8.1 Control parameters**

Components with critical values that require monitoring at the workplace: Observe all workplace limits for dust.

| Hydrogen peroxide | ppm                 | mg/m <sup>3</sup> |
|-------------------|---------------------|-------------------|
| OES (UK – EH40)   | 1 ml/m <sup>3</sup> | 1.4               |
| MAK (D)           | 1 ml/m <sup>3</sup> | 1.4               |
| TLV (USA)         | 1 ml/m <sup>3</sup> | 1.4               |
| ST                | 2 ml/m <sup>3</sup> | 2.8               |

**8.2 Exposure controls**

**Engineering measures** Refer to protective measures listed in sections 7 and 8.

**Personal protective equipment**

|                          |                                                                                                                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory protection   | Do not inhale aerosols. Vapour respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate                        |
| Hand protection          | Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374. Avoid protective gloves made of cotton or leather |
| Eye protection           | Wear safety glasses approved to standard EN 166. Provide eye station                                                                                                                        |
| Skin and body protection | Wear clean, long sleeved, body-covering clothing                                                                                                                                            |
| Other Protection:        | Wear appropriate clothing to prevent any possibility of skin contact                                                                                                                        |

**9. Physical and chemical properties****9.1 Information on basic physical and chemical properties**

|                                         |                              |
|-----------------------------------------|------------------------------|
| Form:                                   | Liquid                       |
| Colour:                                 | colourless                   |
| Odour:                                  | odourless                    |
| pH @ 20°C:                              | 1.7                          |
| Solidification point                    | 114°C                        |
| Boiling point/boiling range:            | -52°C                        |
| Flash point:                            | incombustible                |
| Partial vapour pressure                 | 99 Pa                        |
| Total vapour pressure                   | 2400 Pa                      |
| Relative Density (20OC):                | 1.196 g/cm <sup>3</sup>      |
| Water solubility:                       | complete                     |
| Soluble in:                             | Easily soluble in cold water |
| Relative vapour density:                | N.D                          |
| Viscosity (0OC):                        | 1.85 mPa.s                   |
| Partition coefficient n- octanol/water: | N.D                          |

**9.2 Other Information** No further information available

**10. Stability and reactivity****10.1 Reactivity**

Reactivity No information available.

**10.2 Chemical stability**

Chemical stability The product is a stabilised oxidising agent.

**10.3 Possibility of hazardous reactions**

Hazardous reactions: Danger of decomposition, yielding oxygen, in contact with impurities, decomposition catalysts and incompatible substances

**10.4 Conditions to avoid**

Conditions to avoid Heat

**10.5 Incompatible materials**

Materials to avoid Impurities, metal ions, metallic salts, metals, alkalis, reducing agents and combustible substances.

**10.6 Hazardous decomposition products**

Haz. Decomp. products: None

**11. Toxicological Information****11.1 Information on toxicological effects****Acute Toxicity**

| Hydrogen peroxide |         |      |       |                                         |
|-------------------|---------|------|-------|-----------------------------------------|
| Route             | Species | Test | Value | Units                                   |
| Oral              | Rat     | LD50 | 2896  | mg/kg (according to OECD-guideline 401) |
| Dermal            | Rat     | LD50 | >2000 | mg/kg (according to OECD-guideline 402) |

**11.2 Irritation**

Skin (rabbit): 3.4 (according to OECD-guideline 404)

Eyes (rabbit): 10.3 (according to OECD-guideline 405)

**11.3 Routes of exposure**

Ingestion, inhalation, eye and skin

**11.4 Acute Effects/Symptoms**

**After Inhalation:** Inhalation of aerosols may lead to severe irritation of the respiratory tract and may cause inflammation and pulmonary oedema

**After Ingestion:** Swallowing may lead to burning necrosis of the mucous membranes of mouth, oesophagus and stomach. Rapid liberation of oxygen may cause gastric distension and bleeding and may lead to severe damage to the inside organs, especially if ingestion is gross.

**After Skin Contact:** Causes burns. At prolonged exposure time, irritation (white coloration) of the mucosae and the skin can occur (blistering).

**After Eye Contact:** May cause severe conjunctivitis, cornea injury or irreversible damage to the eyes. Symptoms may occur with delay.

**11.5 Chronic Effects**

Not Applicable

**12. Ecological Information****12.1 Toxicity****Aquatic toxicity:**

| Species                           | Test | ppm | Time | Units  |
|-----------------------------------|------|-----|------|--------|
| Brachydanio rerio                 | LC50 | 4.9 | 96 h | mg / l |
| Daphnia magna (water flea         | EC50 | 2.8 | 24 h | mg / l |
| Daphnia magna (water flea         | EC50 | 1.8 | 48 h | mg / l |
| algae (Selenastrum capricornutum) | EC50 | 1.4 | 72 h | mg / l |

**12.2 Persistence and degradability**

Persistence and degradability The product is biodegradable by absorption of the stabiliser to active silt and by decomposition of the hydrogen peroxide in water and oxygen

**12.3 Bioaccumulative potential**

Bioaccumulative potential Completely water soluble; bioaccumulation is unlikely.

**12.4 Mobility in soil**

Mobility in soil No data available

**12.5 Results of PBT and PvB assessment**

PBT and PvB No data available

**12.6 Other adverse effects**

Other effects No data available

**13. Disposal Considerations****13.1 Waste treatment methods**

Waste is classified as special waste.

**13.2 Disposal Methods**

May be disposed of as sewage water in accordance with local legal regulations by previously diluting with plenty of water (drainage systems, waste water treatment plant). May not be discharged into surface water.

**13.3 Packaging**

Triple rinse empty container thoroughly with water before disposal

**14. Transport Information****14.1 UN Number**

2014

**14.2 UN proper shipping name**

2014 Hydrogen peroxide, aqueous solution

**14.3 Transport hazard class(es)**

|                                      |            |
|--------------------------------------|------------|
| Class                                | 5.1        |
| Hazard label                         | 5.1 and 8  |
| Transport Category                   | 58         |
| Tunnel Code                          | E          |
| EMS No                               | 5.1-02     |
| MFAG                                 | 735        |
| ICAO-TI and IATA-DGR (Air transport) | Prohibited |

**14.4 Packaging Group**

II

**14.5 Environmental hazards**

|                                              |                |
|----------------------------------------------|----------------|
| Classified as environmentally hazardous: ADR | No information |
| Labeling according to 5.2.1.8 RID/IMDG       | No information |

#### 14. Transport Information

##### 14.5 Environmental hazards

Classification as environmentally hazardous according to 2.9.3 IMDG No information  
Classified as "P" according to 2.10 IMDG No information

14.6 Special precautions for user Warning: Corrosive substances

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No data available

#### 15. Regulatory information

##### 15.1 Safety, health and environmental regulations/legislation specific for this substance or mixture.

###### EU Directives

93/112/EC; 67/548/EEC, 88/379/EEC, including amendments

15.2 Chemical Safety Assessment No data available

#### 16. Other information

Full text of H-statements referred to under sections 2 and 3

H271 May cause fire or explosion; strong oxidizer

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled

H335 May cause respiratory irritation

##### 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