



SECTION 1 : Identification of the substance/mixture and of the company/undertaking

- 1.1 **Product Identifier**
Product Name : Tropical Algicide
Datasheet Number : SDS031
Unique Formula Identifier: HN20-K01U-G00R-WWST
- 1.2 **Relevant identified uses of the substance or mixture and uses advised against**
Product category PC37 Water treatment chemicals
- Application of the substance / the mixture** For the prevention and control of severe and persistent algae in the pool water.
- Uses advised against:** Processes involving extreme heat use advised against.
- 1.3 **Details of the supplier of the safety data sheet**
Name of Supplier Isell Ltd
Address of Supplier Unit 5 Penrose House
Treleigh Ind Est
Redruth
Telephone TR16 4DE
E-mail (competent person) info@pure-spa.co.uk
01326 371482
- 1.4 **Emergency Telephone Number**
Emergency Phone No 0800 043 0891 (Technical) 24 Hours a day
0800 043 0892 (Emergency)
Languages Spoken English
- Members of the public seeking specific information on poisons should contact:
In England and Wales: NHS 111 - dial 111
In Scotland: NHS 24 - dial 111

SECTION 2 : Hazards Identification

- 2.1 **Classification of the substance or mixture**
Classification according to Regulation (EC) No 1272/2008
- 
- Skin Corr 1B
Eye Dam. 1
- H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
- 
- Aquatic Acute 1
Aquatic Chronic 2
- H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
- 2.2 **Label elements**
Hazard Pictograms According to Regulation (EC) No. 1272/2008 (CLP)
Signal Word(s) GHS05, GHS09
Hazard-determining components of labelling: Danger
Alkyl(C12-16)dimethylbenzylammonium chloride

2.2 cont..

Hazard Statement(s)

H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth.
Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.

2.3 **Other hazards**

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3 : Composition/Information on Ingredients3.1 **Chemical characterisation:**

Mixtures

Description:

Mixture of substances listed below with nonhazardous additions.

Dangerous Components

Substance	CAS No	EC No	EINECS No	%W/W
copper sulphate pentahydrate	7758-99-8		231-847-6	10-25%
Alkyl(C12-16)dimethylbenzylammonium chloride	68424-85-1		270-325-2	2.5-10%

copper sulphate pentahydrate

Aquatic Acute 1, H400 (M=10)
Aquatic Chronic 1, H410 (M=1)
Acute Tox. 4, H302
Skin Irrit. 2, H315
Eye Irrit. 2, H319

Alkyl(C12-16)dimethylbenzylammonium chloride

Skin Corr. 1B, H314
Aquatic Acute 1, H400 (M=10)
Aquatic Chronic 1, H410 (M=1)
Acute Tox. 4, H302

Additional information:

For the wording of the listed hazard phrases refer to section 16.

SECTION 4 : First Aid Measures

- 4.1 Description of first aid measures**
- General Information:**
- After inhalation: Immediately remove any clothing soiled by the product. 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.
- After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. If vomiting occurs spontaneously, keep head below hips to prevent aspiration
- Information for doctor: Antidote: the use of d-penicillamine as a chelating agent should be determined by a qualified practitioner. Individuals with Wilson's disease are more susceptible to chronic copper poisoning.
- 4.2 Most important symptoms and effects, both acute and delayed**
- Corrosive damage to gastro-intestinal tract.
- Hazards**
- Danger of gastric perforation.
- 4.3 Indication of any immediate medical attention and special treatment needed**
- No further relevant information available.

SECTION 5 : Firefighting Measures

- 5.1 Extinguishing Media :**
- Suitable Extinguishing Agents: CO₂, powder or water spray. Fight larger fires with water spray. Use fire extinguishing methods suitable to surrounding conditions.
- Unsuitable Extinguishing Media: Water with full jet
- 5.2 Special hazards arising from the substance or mixture :**
- During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for Firefighters :**
- Wear self-contained respiratory protective device. Wear fully protective suit. Do not inhale explosion gases or combustion gases
- Additional information**
- Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6 : Accidental Release Measures

- 6.1 Personal precautions, protective equipment and emergency procedures :**
- Ensure adequate ventilation Wear protective clothing. Wear protective equipment.

- | | | |
|-----|--|--|
| 6.2 | Environmental precautions: | Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course in the undiluted form.
Inform respective authorities in case of seepage into water course or sewage system. |
| 6.3 | Methods and material for containment and cleaning up: | Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Send for recovery or disposal in suitable receptacles. |
| 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. |

SECTION 7 : Handling and Storage

- | | | |
|-----|-------------------------------|--|
| 7.1 | Precautions for safe handling | Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols. |
|-----|-------------------------------|--|

Information about fire - and explosion protection:

No special measures required.

- | | | |
|-----|---|--|
| 7.2 | Conditions for safe storage, including any incompatibilities | |
|-----|---|--|

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.
Protect from heat and direct sunlight.
Store in cool, dry conditions in well sealed receptacles.
Store in a bunded area.

Storage class:

8B

- | | | |
|-----|----------------------------|--|
| 7.3 | Specific end use(s) | No further relevant information available. |
|-----|----------------------------|--|

SECTION 8 : Exposure Controls/Personal Protection

- | | | |
|-----|--|--|
| 8.1 | Control Parameters | |
| | Additional information about design of technical facilities: | No further data; see item 7. |
| | Ingredients with limit values that require monitoring at the workplace: | |
| | 7758-99-8 copper sulphate pentahydrate | |
| | WEL | Short-term value: 2 mg/m ³
Long-term value: 1 mg/m ³
Copper and compounds: dust and mist (as Cu) |

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

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.
Storing food in the working area is prohibited.
Do not eat, drink, smoke or sniff while working.
Take note of assigned Workplace Exposure Limits.
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 and skin.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands: Protective gloves
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 Tightly sealed goggles

Body protection:
Protective work clothing
Body protection must be chosen depending on product properties, activity and possible exposure.

SECTION 9 : Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Colour:	Dark Blue
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value at 20 °C:	8-8.5
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not self-igniting.

9.1 cont..

Explosive properties:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density at 20 °C:	1.1 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
VOC (EC)	30.50 %

9.2 Other Information:

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10 : Stability and Reactivity
--

10.1	Reactivity	No further relevant information available.
10.2	Chemical stability Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
10.3	Possibility of hazardous reactions:	No dangerous reactions known.
10.4	Conditions to avoid:	No further relevant information available.
10.5	Incompatible materials:	Strong oxidising agents.
10.6	Hazardous decomposition products:	Carbon monoxide and carbon dioxide Nitrogen oxides (NO _x) Sulphur oxides (SO _x) Metal oxide

SECTION 11 : Toxicological Information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met

LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates) Oral LD50 2,741 mg/kg

Primary irritant effect:

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Additional toxicological information:

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

Chronic copper poisoning in man is recognised in the form of Wilson's disease. Individuals with Wilson's disease are unable to metabolise copper. Thus, copper accumulates in various tissues and may result in liver, kidney and brain damage.

11.1 cont..

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** Based on available data, the classification criteria are not met.**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.**SECTION 12 : Ecological Information**12.1 **Toxicity**

Aquatic Toxicity: No further relevant information available

12.2 **Persistence and degradability**

The organic portion of the product is biodegradable.

12.3 **Bioaccumulative potential**

Product is not expected to bioaccumulate.

12.4 **Mobility in soil**

No further relevant information available.

Ecotoxicological effects: Very toxic for fish.**Additional ecological information:****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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

The surfactants contained in this mixture comply with Regulations (EC) 648/2004.

12.5 **Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.12.6 **Other adverse effects**

No further relevant information available.

SECTION 13 : Disposal Considerations13.1 **Waste treatment methods****Recommendation**

Recommended Hierarchy of Controls:

Minimise waste;

Reuse if not contaminated;

Recycle, if possible; or

Safe disposal (if all else fails).

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.

13.1 cont..

Uncleaned packaging:**Recommendation:**

Disposal must be made according to official regulations.

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

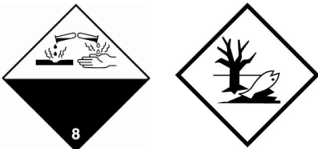

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating.

Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

Recommended cleansing agents :

Water, if necessary together with cleansing agents

SECTION 14 : Transport Information

14.1	UN-Number ADR, IMDG, IATA	UN1760
14.2	UN proper shipping name ADR	UN1760 CORROSIVE LIQUID, N.O.S. (Alkyl(C12-16) dimethylbenzylammonium chloride), ENVIRONMENTALLY HAZARDOUS
	IMDG	CORROSIVE LIQUID, N.O.S. (Alkyl(C12-16) dimethylbenzylammonium chloride, copper sulphate pentahydrate), MARINE POLLUTANT
	IATA	CORROSIVE LIQUID, N.O.S. (Alkyl(C12-16) dimethylbenzylammonium chloride)
14.3	Transport hazard class(es) ADR, IMDG	
		
	Class Label	8 Corrosive substances 8
	IATA	
		
	Class Label	8 Corrosive substances 8
14.4	Packing group ADR, IMDG, IATA	II
14.5	Environmental hazards:	Product contains environmentally hazardous substances:
	Marine pollutant:	Alkyl(C12-16)dimethylbenzylammonium chloride Yes
	Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

14.6	Special precautions for user	Warning: Corrosive substances.
	Hazard identification number (Kemler code):	80
	EMS Number:	F-A,S-B
	Stowage Category	B
	Stowage Code	SW2 Clear of living quarters.
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
	Transport/Additional information:	Not dangerous according to the above specifications.
	ADR	
	Limited quantities (LQ)	1L
	Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
	Transport category	2
	Tunnel restriction code	E
	IMDG	
	Limited quantities (LQ)	1L
	Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
	UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. (ALKYL(C12- 16) DIMETHYLBENZYLAMMONIUM CHLORIDE), 8, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15 : Regulatory Information
--

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Directive 2012/18/EU Named dangerous substances - ANNEX I None of the ingredients is listed.
	Seveso category	E1 Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
15.2	Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

SECTION 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 phrases

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2