

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

- 1.1 Product Identifier**
 Product Name : Algicide Microcide
 Datasheet Number : SDS034
 Unique Formula Identifier: TW20-3041-E007-WXJ0
- 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 control of algae in swimming 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
 Languages Spoken 0800 043 0891 (Technical) 24 Hours a day
 0800 043 0892 (Emergency)
 Members of the public seeking specific information in English 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**

Aquatic Acute 1 : H400 Very toxic to aquatic life.
 Aquatic Chronic 2 : H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements According to Regulation (EC) No. 1272/2008 (CLP)
 The product is classified and labelled according to the GB CLP regulation.

Hazard Pictograms GHS09
 Signal Word(s) Warning
 Hazard Statement(s) H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

2.2 cont..

Precautionary Statement(s)

P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if # present and easy to do. Continue rinsing.
P391 Collect spillage
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other Hazards

PBT: Not applicable.
 vPvB: Not applicable.

SECTION 3 : Composition/Information on Ingredients

3.1 Chemical Characteristics
Description

Mixtures
 Mixture of substances listed below with nonhazardous additions.

Substance	CAS No	EC No	Reach Registration No	%W/W
Polyquaternary ammonium compound	25988-97-0	687-444-4		>10-≤25%

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.
 The active ingredient is listed in Directive 1451/2007/EC, Annex II.

SECTION 4 : First Aid Measures

4.1 Description of 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.
 After eye contact: If skin irritation continues, consult a doctor.
 Rinse opened eye for several minutes under running water.
 After swallowing: Check for and remove any contact lenses.
 Rinse out mouth and then drink plenty of water.
 Do not induce vomiting; call for medical help immediately.
 If symptoms persist, consult a doctor.
 If vomiting occurs spontaneously, keep head below hips to prevent aspiration
 Information for doctor: Treat symptomatically and supportively.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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** : Formation of toxic gases is possible during heating or in case of fire.
- 5.3 **Advice for Firefighters** : Do not inhale explosion gases or combustion gases. Wear self-contained respiratory protective device. Wear fully protective suit.

SECTION 6 : Accidental Release Measures

- 6.1 **Personal precautions, protective equipment and emergency procedures** : Ensure adequate ventilation
Wear protective clothing.
- 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.
Prevent formation of aerosols.
Ensure good ventilation/exhaustion at the workplace.
- 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

7.2 cont..

Information about storage in one common storage facility:

Store away from foodstuffs.
Store away from oxidising agents.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.
Protect from frost.
Store in a bunded area.

Storage class:

12

7.3 **Specific end use(s)**

No further relevant information available.

SECTION 8 : Exposure Controls/Personal Protection8.1 **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:**

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.8.2 **Exposure controls****General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.
Avoid close or long term contact with the skin.
Avoid contact with the eyes.
Wash hands before breaks and at the end of work.

Respiratory protection:

Not necessary if room is well-ventilated.
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.

Nitrile rubber, NBR

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:

Goggles recommended during refilling.

Body protection:

Impervious protective 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:	Fluid
Colour:	According to product specification
Odour:	Mild
Odour threshold:	Not determined.
pH-value (10 g/l) at 20 °C:	5-8
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Product is not self-igniting.
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:	1.035 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.

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 Hydrogen chloride (HCl) Nitrogen oxides (NOx) Halogenated compounds

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 8,917 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

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

Additional toxicological information:

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

Biodegradable

12.3 Bioaccumulative potential

Product is not expected to bioaccumulate.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects:

Remark: Very toxic for fish.

Additional ecological information:

General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

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 Considerations

13.1 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.

Uncleaned packaging:

Recommendation:

Container remains hazardous when empty.

Continue to observe all precautions.

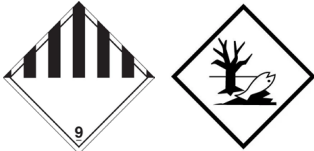
Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating.

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	UN3082
14.2	UN proper shipping name ADR IMDG IATA	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O. S. (Polyquaternary ammonium compound) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyquaternary ammonium compound), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyquaternary ammonium compound)
14.3	ADR, IMDG, IATA  Class Label	9 Miscellaneous dangerous substances and articles. 9
14.4	Packing group ADR, IMDG, IATA	III

SECTION 14 : Transport Information

14.5	Environmental hazards:	Product contains environmentally hazardous substances: Polyquaternary ammonium compound
	Marine pollutant:	Yes
	Special marking (ADR):	Symbol (fish and tree)
	Special marking (IATA):	Symbol (fish and tree)
14.6	Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
	Hazard identification number (Kemler code):	90
	EMS Number:	F-A,S-F
	Stowage Category	A
14.7	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable
	Transport/Additional information:	Amounts up to 5kg or 5L per single or inner package are not regulated according to ADR/RID SP 375, IMDG 2.10.2.7 and IATA SP A197.
	ADR	
	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
	IMDG	
	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
	UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYQUATERNARY AMMONIUM COMPOUND), 9, III

SECTION 15 : Regulatory Information
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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.

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)

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

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