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

1.1 Product Identifier

Product Name :	Winterclean Concentrate
Datasheet Number :	SDS037
Unique Formula Identifier:	E530-M067-A00Q-VY96

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.
Identified Use(s) Uses advised against	Processes involving extreme heat use advised against.

1.3 Details of the supplier of the safety data sheet

Name of Supplier	Plastica Ltd
Address of Supplier	Perimeter House, Napier Road St Leonards-on-Sea, East Sussex TN38 9NY, United Kingdom
Telephone	+44 (0) 1424 857857
E-mail (competent person)	info@plasticapools.net

1.4 Emergency Telephone Number

Emergency Phone No	0800 043 0891 (Technical) 24 Hours a day 0800 043 0892 (Emergency)
Languages Spoken	English advised against.

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

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

Eye Irrit. 2	H319 Causes serious eye irritation.

2.2 **Label elements** According to Regulation (EC) No. 1272/2008 (CLP)
Hazard Pictograms GHS07, GHS09
Signal Word(s) Warning
Hazard Statement(s) H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.

2.3 **Other hazards**
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

SECTION 3 : Composition/Information on Ingredients

3.1 **Chemical characterisation:** Mixtures
Description: Mixture of substances listed below with nonhazardous additions.

Substance	CAS No	EC No	EINECS No	%W/W
Polyquaternary ammonium compound	25988-97-0	687-444-4		10-25%
Etidronic acid	2809-21-4		220-552-8	2.5-10%

Polyquaternary ammonium compound	Aquatic Acute 1, H400 (M=10);
Polyquaternary ammonium compound	Aquatic Chronic 1, H410 (M=1);
Polyquaternary ammonium compound	Acute Tox. 4, H302;
Etidronic acid	Met. Corr.1, H290;
Etidronic acid	Eye Dam. 1, H318;
Etidronic acid	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**

After inhalation:	Supply fresh air; consult doctor in case of complaints.
After skin contact:	Immediately wash 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. If symptoms persist 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:	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:	CO_2, 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 :** — Wear fully protective suit.
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.

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. 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. Store away from oxidising agents.
	Further information about storage conditions:	Protect from frost. Store in a bunded area. Store in cool, dry conditions in well sealed receptacles.
	Storage class:	12
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:
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** **Personal protective equipment:**	
	General protective and hygienic measures:	Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed. Avoid close or long term contact with the skin. 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

8.2 cont..

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
Tightly sealed goggles.

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:	Red
Odour:	Mild
Odour threshold:	Not determined.
pH-value:	Not determined
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:	1.06 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
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 7,138 mg/kg (rat)

Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
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:
CMR effects (carcinogenity, 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.

Ecotoxical effects:
Remark: Very toxic for fish.
Additional ecological information:
General notes:
Water hazard class 3 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.

12.4 cont..
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms
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 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:
Disposal must be made according to official regulations.
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.

SECTION 14 : Transport Information

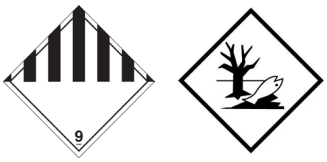
14.1 **UN-Number**

ADR, IMDG, IATA	UN3082

14.2 **UN proper shipping name**

ADR	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O. S. (Polyquaternary ammonium compound).
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyquaternary ammonium compound), MARINE POLLUTANT.
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyquaternary ammonium compound.

14.3 **ADR, IMDG, IATA**



Class	9 Miscellaneous dangerous substances and articles
Label	9

14.4 **Packing group**

ADR, IMDG, IATA	III

14.5 **Environmental hazards** — Product contains environmentally hazardous substances: Polyquaternary ammonium compound

Marine Pollutants	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 SUB STANCE, LIQUID, N.O.S. (POLYQUATERNARY AMMONIUM COMPOUND), 9, III

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
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H318 Causes serious eye damage.
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
Met. Corr.1: Corrosive to metals – Category 1
Acute Tox. 4: Acute toxicity – Category 4
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