

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

Product Name : Algae Eliminator
 Datasheet Number : SDS031
 Unique Formula Identifier: HN20-K01U-G00R-WWST

1.2 Relevant identified uses of the substance or mixture and uses advised against

Application of the substance / the mixture For the prevention and control of severe algae in pool water.
 Identified Use(s) Uses advised against Processes involving extreme heat use advised against.
 Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE)

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

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


Corrosion

Skin Corr. 1B
 Eye Dam. 1

H314 - Causes severe skin burns and eye damage
 H318 - Causes eye damage



Environment

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 Signal Word(s) Hazard-determining components of labelling:	According to Regulation (EC) No. 1272/2008 (CLP) GHS05, GHS09 Danger Copper sulphate pentahydrate Alkyl(C12-16)dimethylbenzylammonium chloride
	Hazard Statement(s)	H314 Causes severe skin burns and eye damage. H410 Very toxic to aquatic life with long lasting effects.
	Precautionary statements	P260 Do not breathe dusts or mists. 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. P310 Immediately call a POISON CENTER/doctor. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
	Additional Information	Contains biocidal products: copper sulphate pentahydrate, Alkyl(C12-16)dimethylbenzylammonium chloride
2.3	Other hazards Results of PBT and vPvB assessment PBT: vPvB:	Not applicable. Not applicable.

SECTION 3 : Composition/Information on Ingredients

3.2	Chemical characterisation: Description:	Mixtures Mixture of substances listed below with nonhazardous additions.
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Substance	CAS No	EC No	EINECS No	%W/W
copper sulphate pentahydrate	7758-99-8	616-477-9		10-25%
Alkyl(C12-16)dimethylbenzylammonium chloride	68424-85-1	939-253-5		2.5-10%

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:

After skin contact:

After eye contact:

After swallowing:

Information for doctor:

Immediately remove any clothing soiled by the product.

Supply fresh air; consult doctor in case of complaints.

Immediately rinse with water.

Check for and remove any contact lenses.

Rinse opened eye for several minutes under running water.

Then consult a doctor..

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.

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.

Inhalation of an aerosol of this substance may cause lung oedema.

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 :

In case of fire the following can be released:

Nitrogen oxides (NO_x)

Chlorine compounds

Carbon monoxide (CO)

Sulphur Oxides (SO_x)

Toxic metal oxide smoke

5.3 Advice for Firefighters :

Wear fully protective suit.

Wear self-contained respiratory protective device.

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.
- 6.2 **Environmental Precautions:** Do not allow to penetrate the ground/soil.
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.
- 6.3 **Methods and material for containment and cleaning up:** Contain and collect spillage with non-combustible, absorbent material eg sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
Contaminated absorbent material may pose the same hazard as the spilt product.
- 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.
Safety showers and eye wash facilities should be available at the work area.

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: 8B

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

SECTION 8 : Exposure Controls/Personal Protection

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace	
7758-99-8 copper sulphate pentahydrate	
WEL	Short-term value: 2 mg/m ³ Lone-term value: 1 mg/m ³ Copper and compound: dust and mist (as CU)

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

8.2 Exposure controls

Appropriate engineering controls

No further data; see section 7

Personal protective equipment: General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.
Avoid close or long term contact with the skin.
Do not eat, drink, smoke or sniff while working.
Take note of assigned Workplace Exposure Limits.
Keep away from foodstuffs, beverage 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.
Ensure that eyewash stations and safety showers are close to the workstation location.

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 conforming to EN166.

Body protection:

Protective work clothing.

Body protection must be chosen depending on product properties, activity and possible exposure.

Environmental exposure controls Risk management measures

Do not allow to enter drains, sewers or watercourses.
The operators shall be instructed adequately.

SECTION 9 : Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Dark Blue
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>100 °C
Flammability:	Not applicable.
Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH at 20°C	8 - 8.5
Viscosity:	
Kinematic viscosity:	Not determined.
Dynamic:	Not determined.
Solubility	
Water:	Fully miscible.
Partition coefficient n-octanol/water	Not determined.
Vapour pressure at 20°C:	23 hPa
Density and/or relative density	
Density at 20°C:	1,110 g/cm ³
Relative density:	Not determined.
Vapour density:	Not determined.

9.2 Other Information:

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

Appearance:	Liquid
Ignition temperature:	Product is not self-igniting.
Explosive properties:	Product does not present an explosion hazard.
Change in condition	
Evaporation rate:	Not determined.
Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitized explosives	Void

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
Chlorine compounds
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	2,598 mg/kg

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

Serious eye damage/irritation: Causes serious eye damage.

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

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.

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.

Inhalation may cause lung oedema, but only after initial corrosive effects on eyes and/or airways have become manifest. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

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.

- 11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed

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.
- 12.5 **Results of PBT and vPvB assessment**
PBT: Not applicable.
vPvB: Not applicable.
- 12.6 **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- 12.7 **Other adverse effects** **Remark** - Very toxic to fish.
General notes The surfactants contained in this mixture comply with Regulations (EC) 648/2004. 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

SECTION 13 : Disposal Considerations

- 13.1 **Waste treatment methods**
Recommendation
Recommended Hierarchy of Controls:
Minimize waste;
Reuse if not contaminated;
Recycle, if possible; or
Safe disposal (if all else fails).
Must not be disposed together with household garbage.
Do not allow product to reach sewage system.
Contact waste processors for recycling information.
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:
Empty contaminated packagings thoroughly.
They may be recycled after thorough and proper cleaning.
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, RID, ADN, IMDG, IATA	UN1760
14.2	UN proper shipping name ADR, RID, ADN	UN1760 Corrosive Liquid N.O.S (Alkyl(C1216) 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, RID, ADN, IMDG, IATA Class Label	8 Corrosive substances 8
14.4	Packing group ADR, RID, ADN, IMDG, IATA	II
14.5	Environmental hazards: Marine Pollutant	Product contains environmentally hazardous substances: copper sulphate pentahydrate Symbol (fish and tree)
14.6	Special precautions for user Hazard id number (Kemler code) Hazchem Code: EMS Number: Stowage Category: Stowage Code:	Warning: Corrosive substances. 80 2X F-A,S-B B 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: ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ)	1L Code:E2 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 500ml
	Transport category: Tunnel restriction code:	2 E
	IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30ml Maximum net quantity per outer packaging: 500ml
	UN "Model Regulation":	UN1760 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
Poisons Act**

Regulated explosives precursors	None of the ingredients is listed.
Regulated poisons	None of the ingredients is listed.
Reportable explosives precursors	None of the ingredients is listed.
Reportable poisons	None of the ingredients is listed.

Directive 2012/18/EU**Named dangerous substances - ANNEX I** None of the ingredients is listed.**Sevesco category:** E1

Qualifying quantity (tonnes) for the application of lower-tier requirements 100t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200t

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. H318 Causes serious eye damage.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Training hints

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

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

ATE: Acute toxicity estimate values

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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 A

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2