

SAFETY DATA SHEET – COPPER BASED LONG-LIFE ALGAECIDE

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING	
1.1 Product identifier	COPPER BASED LONG-LIFE ALGAECIDE
1.2 Relevant identified uses of the substance or mixture and uses advised against	Intended use: Treatment of swimming pools and spas
1.3 Details of the supplier of the SDS	A & R Products (South East) Ltd Europa House Pivington Mill Pluckley Kent TN27 0PG SDS compiler: mail@arproducts.co.uk
1.4 Emergency telephone number:	01233 841855 (Monday – Friday 9.00 – 17.00 hrs GMT)
SDS Issue 1:	07/03/2013

SECTION 2 HAZARDS IDENTIFICATION	
2.1 Classification of the substance or mixture	Classification to CLP ((EC) No 1272/2008): Aquatic Chronic 3; H412
see section 16 for full text of H-and R- phrases	Classification to DSD (67/548/EEC) and CHIP: Dangerous for the environment R52/53
2.2 Label elements	Labelling in accordance with CLP ((EC) No 1272/2008) <i>H412</i> Harmful to aquatic life with long lasting effects. <i>P102</i> Keep out of reach of children. <i>P262</i> Do not get in eyes, on skin, or on clothing <i>P280</i> Wear protective gloves/ protective clothing/eye protection/ face protection. <i>P302+352</i> IF ON SKIN: Wash with plenty of soap and water <i>P305 + P351 + P338</i> IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. <i>P273</i> Avoid release to the environment
Note: <i>italicized items</i> (H and P Statements codes) are not included on label	
2.3 Other hazards	Not identified as a PBT substance

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS													
3.2 Mixtures													
Hazardous Ingredients:													
see section 16 for full text of classification phrases	<table border="1"> <thead> <tr> <th>Name</th> <th>EC No.</th> <th>CAS No.</th> <th>DSD classn.</th> <th>CLP Classification</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Copper Sulphate</td> <td>231-847-6</td> <td>7758-98-7</td> <td>Xn; R22 Xi; R36/38 N; R50/53</td> <td>Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Chronic 1; H410 Aquatic Acute 1; H400</td> <td>1 - 10</td> </tr> </tbody> </table>	Name	EC No.	CAS No.	DSD classn.	CLP Classification	%	Copper Sulphate	231-847-6	7758-98-7	Xn; R22 Xi; R36/38 N; R50/53	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Chronic 1; H410 Aquatic Acute 1; H400	1 - 10
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SECTION 4 FIRST AID MEASURES	
4.1 Description of first aid measures	<p>Skin contact: Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.</p> <p>Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.</p> <p>Ingestion: Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.</p> <p>Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. Transfer to hospital as soon as possible.</p>
4.2 Most important symptoms and effects, both acute and delayed	<p>Skin contact: There may be mild irritation at the site of contact.</p> <p>Eye contact: There may be irritation and redness.</p> <p>Ingestion: Nausea and stomach pain may occur. There may be vomiting. Inhalation of fumes from the stomach may cause symptoms similar to direct inhalation.</p> <p>Inhalation: Liquid product, Inhalation unlikely. Nausea and stomach pain may occur. There may be vomiting. Drowsiness or mental confusion may occur. There may be loss of consciousness.</p>
4.3 Indication of immediate medical attention and special treatment needed, if necessary	Not applicable

SECTION 5 FIREFIGHTING MEASURES	
5.1 Extinguishing media	Carbon dioxide
5.2 Specific hazards arising from the substance or mixture	In combustion emits toxic fumes
5.3 Advice for fire-fighters	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6 ACCIDENTAL RELEASE MEASURES	
6.1 Personal precautions, protective equipment and emergency procedures	Restrict access to area as appropriate until clean-up operations are complete. Use personal protective equipment recommended in Section 8 (Exposure controls/Personal Protection). Stop or reduce any leaks if it is safe to do so. Turn leaking containers leak-side up to prevent the escape of liquid.
6.2 Environmental precautions	Do not discharge into drains or rivers. Contain the spillage using bunding.
6.3 Methods and material for containment and cleaning up	Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.
6.4 Reference to other sections	Personal protective equipment: See section 8

SECTION 7 HANDLING AND STORAGE	
7.1 Precautions for safe handling	Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.
7.2 Conditions for safe storage, including any incompatibilities	Store in cool, well ventilated area. Keep container tightly closed.
7.3 Specific end use(s)	For treatment of swimming pools

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION	
8.1 Control parameters	Workplace Exposure Limits (WEL): Copper sulphate: LTEL (8hr TWA): 1 mg/m ³ ; STEL (15 min.) 2 mg/m ³
8.2 Exposure controls	Engineering measures: Ensure there is sufficient ventilation of the area. Respiratory protection: No specific recommendations, but respiratory protection may be required under exceptional circumstances.. Hand protection: Protective gloves. Eye protection: Safety goggles. Skin protection: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Information on basic physical and chemical properties – does not constitute a specification	
Appearance	Dark blue liquid
Odour	Perceptible odour
Odour threshold	no data available
pH	7.8 – 8.2
Melting Point/Freezing point (°C)	No data available
Initial boiling point/boiling range (°C)	No data available
Flash Point (°C)(closed cup)	not applicable (non-flammable)
Evaporation rate	no data available
Flammability	not applicable (non-flammable)
Upper/lower flammability limits	not applicable (non-flammable)
Vapour pressure (mbar @ 20°C)	no data available
Vapour density	No data available
Relative Density (@15.5°C)	1.020 – 1.030
Solubility in water	soluble
Solubility in fat / solvent	not miscible
Partition coefficient (log Pow)	no data available
Autoignition temperature (°C)	not applicable (non-flammable)
Decomposition temperature	no data available
Viscosity	Non-viscous
Explosive properties	not explosive
Oxidising properties	None
9.2 Other information	None

SECTION 10 STABILITY AND REACTIVITY	
10.1 Reactivity	Stable under recommended transport or storage conditions.
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
10.4 Conditions to avoid	Avoid high temperatures
10.5 Incompatible materials	Strong oxidising agents. Strong acids.
10.6 Hazardous decomposition products	In combustion emits toxic fumes.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity

-oral	LD50: >20000 mg/kg (species : rat)
-	LD50: >20000 mg/kg (species: mouse)
-intravenous	LD50: >2000 mg/kg (species : rat)

Copper sulphate

Acute Toxicity

-oral	LD50: 520 mg/kg (species : rat)
-	LD50: 369 mg/kg (species: mouse)
-intravenous	LD50: 48900 µg/kg (species : rat)

Corrosivity/Irritation No data available

Sensitisation -skin

Not sensitizing components present

Other relevant toxicity information

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting. Inhalation of fumes from the stomach may cause symptoms similar to direct inhalation.

Inhalation: Liquid product, Inhalation unlikely. Nausea and stomach pain may occur. There may be vomiting. Drowsiness or mental confusion may occur. There may be loss of consciousness.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity	No data available
12.2 Persistence and degradability	Biodegradable in part only
12.3 Bioaccumulative potential	Bioaccumulation potential
12.4 Mobility in soil	Soluble in water
12.5 Results of PBT and vPvB assessment	No known PBT or vPvB chemicals present
12.6 Other adverse effects	No further data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste Residue:	Disposal should be carried out by licensed contractors. Disposal to a special waste disposal plant, in accordance with local council regulations. Do not allow entry to drains or waterways. The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.
Packaging:	Containers must be disposed of in a safe way.

SECTION 14 TRANSPORT INFORMATION

Not classified as dangerous goods for carriage under ADR/RID/ADN/IMDG/ICAO/IATA regulations

14.1 UN Number	Not applicable
14.2 UN Proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	Not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

SECTION 15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Supply regulations: Classified as hazardous under DPD/GHS/CLP criteria (DSD: Dangerous Preparations Directive; GHS: Globally Harmonised system of classification and labelling of chemicals; CLP: Classification, Labelling and Packaging regulations)
Transport regulations: Not classified as Dangerous Goods for Carriage under ADR/RID/IMDG/ICAO/IATA regulations

15.2 Chemical Safety Assessment

No formal chemical safety assessment has been carried out

SECTION 16 OTHER INFORMATION

Full text of classification data in sections 2 and 3

Acute tox.4; H302	Acute toxicity, category 4; Harmful if swallowed
Skin Irrit.2; H315	Skin irritant category 2; Causes skin irritation
Eye Irrit.2; H319	Eye Irritant category 2; Causes serious eye irritation.
Aquatic Chronic 1; H410	Chronic aquatic toxicity category 1; Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 3; H412	Chronic aquatic toxicity category 3; Harmful to aquatic life with long lasting effects.
Xn ; R22	Harmful; Harmful if swallowed.
Xi ; R36/38	Irritant; Irritating to eyes and skin
N ; R50/53	Dangerous for the Environment; Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text