Revision: 28 December 2022

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Summerlong/Winterlong
- Datasheet Number: SDS 033
- BPR Authorisation Number: UK-2018-1148-0003 / UK-2018-1148-0004
- Contains copper (II) sulphate pentahydrate (8.8%)

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

- Use of the substance/mixture: PT02 - Disinfectants and algaecides not intended for direct application to humans or animals; For the control of algae in swimming pool water.
- Use advised against: No information available

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
  United Kingdom
  TN38 9NY
- Telephone: +44 (0) 1424 857857
- Email: info@plasticapools.net

1.4 Emergency telephone number

- Emergency Telephone: 0800 043 0891 (technical)
  0800 043 0892 (emergency)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
- Additional information: For full text of Hazard and EU Hazard statements: see section 16

2.2 Label elements



Signal Word: Danger

Hazard statements

H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

P391 - Collect spillage.
P273 - Avoid release to the environment.
P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

SECTION 2: Hazards identification (....)

Supplemental Hazard information (EU)

BPR Authorisation Number: UK-2018-1148

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII
- Does not contain any substances with endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

- Contains the following hazardous ingredients or ingredients with a workplace exposure limit:

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Citric acid monohydrate	10 - < 20%	5949-29-1 77-92-9	201-069-1	Eye Irrit. 2, H319 STOT SE 3, H335	-	01-2119457026 -42-XXXX	No
Copper (II) sulphate pentahydrate	3 - 10%	7758-99-8	231-847-6	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE (oral) 482 mg/kg M factor (Acute) = 10 M factor (Chronic) = 10	01-2119520566 -40-XXXX	No

SECTION 4: First aid measures

4.1 Description of first aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid
Rescuers should take suitable precautions to avoid becoming casualties themselves

Contact with eyes

If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
Get immediate medical advice/attention.

Contact with skin

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water
If skin irritation or rash occurs: Get medical advice/attention.
Contaminated clothing should be laundered before reuse

Ingestion

Rinse mouth with water (do not swallow)
Give plenty of water to drink
Never give anything by mouth to an unconscious person
Get medical advice/attention.

Inhalation

Remove person to fresh air and keep comfortable for breathing.
If breathing is difficult, oxygen should be given by a trained person
Get medical advice/attention.

SECTION 4: First aid measures (....)

4.2 Most important symptoms and effects, both acute and delayed

Contact with eyes

Causes redness and swelling
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.

Contact with skin

No hazard expected under normal conditions of use

Ingestion

May cause nausea/vomiting

Inhalation

No hazard expected under normal conditions of use

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Unsuitable extinguishing media: No information available

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.

5.3 Advice for firefighters

- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.
- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions for non-emergency personnel: Avoid contact with skin and eyes; Do not breathe dust/fume/gas/mist/vapours/spray; Wear protective clothing as per section 8; Wash thoroughly after handling; Eyewash bottles should be available
- Personal precautions for emergency responders: Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA)

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Evacuate the area and keep personnel upwind
- Absorb spillage in earth or sand
- Place in appropriate container
- Seal containers and label them

SECTION 6: Accidental release measures (....)

- Remove contaminated material to safe location for subsequent disposal
- To be disposed of as hazardous waste

6.4 Reference to other sections

- See section(s): 7, 8 & 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Ensure adequate ventilation
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not get in eyes, on skin, or on clothing.
- Wear protective clothing as per section 8
- Do not eat, drink or smoke when using this product.
- Eyewash bottles should be available
- Wash thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Contaminated clothing should be laundered before reuse

7.2 Conditions for safe storage, including any incompatibilities

- Keep locked up and out of reach of children
- Keep in a cool, dry, well ventilated place
- Protect from light
- Protect from frost
- Keep away from heat and sources of ignition
- Keep away from food, drink and animal feedingstuffs
- Keep only in the original container
- Keep container tightly closed.
- Shelf life: 2 years

7.3 Specific end use(s)

- Biocide
- For the control of algae in swimming pool water.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
  Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Citric acid monohydrate

PNEC aqua (freshwater) 440 µg/L
PNEC aqua (marine water) 44 µg/L
PNEC (STP) 1 g/L
PNEC sediment (freshwater) 34.6 mg/kg
PNEC sediment (marine water) 3.46 mg/kg
PNEC terrestrial (soil) 33.1 mg/kg

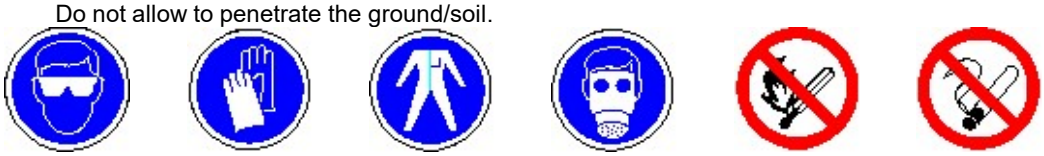
SECTION 8: Exposure controls/personal protection (....)

Copper (II) sulphate pentahydrate (as copper sulphate)

DNEL (inhalational) 1 mg/m³ Industry, Long Term, Systemic Effects
DNEL (inhalational) 1 mg/m³ Industry, Long Term, Local Effects
DNEL (dermal) 137 mg/kg bw/day Industry, Long Term, Systemic Effects
DNEL (oral) 41 µg/kg bw/day Consumer, Long Term, Systemic Effects
DNEL (oral) 82 µg/kg bw/day Consumer, Acute/Short Term, Systemic Effects
PNEC aqua (freshwater) 7.8 µg/L
PNEC aqua (marine water) 5.2 µg/L
PNEC (STP) 230 µg/L
PNEC sediment (freshwater) 87 mg/kg
PNEC sediment (marine water) 676 mg/kg
PNEC terrestrial (soil) 65 mg/kg

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
  Engineering controls should be provided to prevent the need for ventilation
- Respiratory protection
  In case of insufficient ventilation, wear suitable respiratory equipment
  Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827
  Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK
- Eye/face protection
  Wear goggles giving complete eye protection
  If risk of splashing, wear face-shield approved to standard EN 166 1B39N
- Skin protection
  Wear suitable protective clothing
  Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
  The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
  Due to missing tests no recommendation to the glove material can be given for the product
- Thermal hazards
  Not applicable
- Hygiene measures
  Do not eat, drink or smoke when using this product.
  Use good personal hygiene practices
  Wash thoroughly after handling.
  Contaminated work clothing should not be allowed out of the workplace.
  Ensure eyewash stations and safety showers are close to hand.
- Environmental exposure controls
  Do not empty into drains
  Do not allow to penetrate the ground/soil.



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

SECTION 9: Physical and chemical properties (....)

- Physical state: Liquid
- Colour: Clear blue/green
- Odour: Characteristic odour
- Melting point/freezing point: No data available
- Boiling point or initial boiling point and boiling range: 100 °C
- Flammability: Not flammable
- Lower and upper explosion limit: Not applicable
- Flash point: Not applicable
- Auto-ignition temperature: No information available
- Decomposition temperature: No information available
- pH: 1.3 (neat), 2.6 (1% dilution)
  Acidity: 8.78 % w/w as H_2SO_4
- Kinematic viscosity: 1.68 cSt (mm^2/s) @ 20 °C
  1.39 cSt (mm^2/s) @ 40 °C
- Solubility: Soluble in water
- Partition coefficient n-octanol/water (log value): Not determined
- Vapour pressure: 23 hPa
- Density and/or relative density: 1.0976 g/mL @ 20°C
- Relative vapour density: Not determined
- Particle characteristics: Not applicable

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- No hazardous reactions known if used for its intended purpose

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

10.4 Conditions to avoid

- Avoid extremes of temperature

10.5 Incompatible materials

- Incompatible with strong acids
- Incompatible with strong oxidizing substances

10.6 Hazardous decomposition products

- Decomposition products may include toxic and irritant fumes

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- Acute Toxicity
  ATE mix (oral) > 2 000 mg/kg
  Based on available data, the classification criteria are not met

SECTION 11: Toxicological information (....)

Substances

Chemical Name	LD_{50} (oral, rat)	LC_{50} (inhalation, rat)	LD_{50} (dermal, rabbit)
Citric acid monohydrate	3 000 mg/kg	No data available	> 2 000 mg/kg (rat)
Copper (II) sulphate pentahydrate	482 mg/kg	No data available	2 000 mg/kg

- Skin corrosion/irritation
  Based on available data, the classification criteria are not met
  Product is non-corrosive to skin according to OECD TG No. 431

Substances

Chemical Name	Irritation/corrosion
Citric acid monohydrate	No adverse effect observed (not irritating)
Copper (II) sulphate pentahydrate	No data available

- Serious eye damage/irritation
  Causes serious eye damage
  Classification based on calculation and concentration thresholds

Substances

Chemical Name	Irritation/corrosion
Citric acid monohydrate	Adverse effect observed (irritating)
Copper (II) sulphate pentahydrate	No data available

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

Substances

Chemical Name	Skin sensitisation	Respiratory sensitisation
Citric acid monohydrate	No adverse effect observed (not sensitising)	No study available
Copper (II) sulphate pentahydrate	No data available	No data available

- Germ cell mutagenicity
  Based on available data, the classification criteria are not met

Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Citric acid monohydrate	Adverse effect observed (positive)	No adverse effect observed (negative)
Copper (II) sulphate pentahydrate	No data available	No data available

- Carcinogenicity
  Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)

Citric acid monohydrate	No data available	No data available	No data available
Copper (II) sulphate pentahydrate	No data available	No data available	No data available

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

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Citric acid monohydrate	No data available	No data available	No data available
Copper (II) sulphate pentahydrate	No data available	No data available	No data available

- Specific target organ toxicity (STOT) - single exposure
  Based on available data, the classification criteria are not met

Substances

Chemical Name	Route	Remarks
Citric acid monohydrate	Respiratory	Adverse effect observed (irritating)
Copper (II) sulphate pentahydrate	Respiratory	No data available

- Specific target organ toxicity (STOT) - repeated exposure
  Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Citric acid monohydrate	No data available	No data available	No data available
Copper (II) sulphate pentahydrate	1 000 ppm	2 mg/m³	No data available

- Aspiration hazard
  Based on available data, the classification criteria are not met
- Contact with eyes
  Causes redness and swelling
  Causes burning sensation
  May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin
  No hazard expected under normal conditions of use
- Ingestion
  May cause nausea/vomiting
- Inhalation
  No hazard expected under normal conditions of use

11.2 Information on other hazards

- Does not contain any substances with endocrine disrupting properties

SECTION 12: Ecological information

12.1 Toxicity

- Very toxic to aquatic life with long lasting effects
- Classification based on calculation and concentration thresholds
- M factor (Acute) Copper sulphate = 10
- M factor (Chronic) Copper sulphate = 10

Substances

Chemical Name	LC_{50} (fish)	EC_{50} (aquatic invertebrates)	EC_{50} (aquatic algae)
Citric acid monohydrate	(4 days) 100 mg/L	(48 h) 50 mg/L	No data available
Copper (II) sulphate pentahydrate	(4 days) 2.8 - 9 150 µg/L	(48 h) 1 - 1 213 µg/L	(72 h) 16.5 - 987 µg/L

12.2 Persistence and degradability

- Expected to be biodegradable

Substances

Chemical Name	Biodegradation
Citric acid monohydrate	Readily biodegradable (100%)
Copper (II) sulphate pentahydrate	Not applicable, inorganic

12.3 Bioaccumulative potential

- Low potential for bioaccumulation

Substances

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Citric acid monohydrate	Low potential for bioaccumulation (Log Kow ≤ 3)	(Log Pow) -1.6
Copper (II) sulphate pentahydrate	Bioaccumulation is not expected	Not applicable, inorganic

12.4 Mobility in soil

- No information available

Substances

Chemical Name	Adsorption/desorption	Mobility
Citric acid monohydrate	No data available	No data available
Copper (II) sulphate pentahydrate	No data available	Soluble in water

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Endocrine disrupting properties

- Does not contain any substances with endocrine disrupting properties

12.7 Other adverse effects

- No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Do not discharge untreated concentrate into drains
- This material and/or its container must be disposed of as hazardous waste
- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
- Hazardous Property Code(s): HP 4 Irritant; HP 14 Ecotoxic

SECTION 14: Transport information

UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.





14.1 UN number or ID number

- UN No.: 3082

14.2 UN proper shipping name

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (copper sulphate pentahydrate)

14.3 Transport hazard class(es)

- Hazard Class: 9

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

14.6 Special precautions for user

- No special precautions are required for this product

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable

14.8 Road/Rail (ADR/RID)

- ADR UN No.: 3082
- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (copper sulphate pentahydrate)
- ADR Hazard Class: 9
- ADR Packing Group: III
- Tunnel Code: Not applicable

14.9 Sea (IMDG)

- IMDG UN No.: 3082

SECTION 14: Transport information (....)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (copper sulphate pentahydrate)
- IMDG Hazard Class: 9
- IMDG Packing Group: III

14.10 Air (ICAO/IATA)

- ICAO UN No.: 3082
- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (copper sulphate pentahydrate)
- ICAO Hazard Class: 9
- ICAO Packing Group: III

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 (as amended by Regulation (EU) 2020/878) and UK REACH
- The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- The Hazardous Waste (England and Wales) Regulations 2005 apply in the UK
- This product is covered by EU Directive 2012/18/EU (the Seveso III Directive)
- This product is covered by the GB Biocidal Products Regulation (GB BPR)
- This product is covered by the EU Biocides Regulation 528/2012 (EU BPR)
- BPR Authorisation Number: UK-2018-1148
- UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.

15.2 Chemical safety assessment

- A REACH chemical safety assessment has not been carried out

SECTION 16: Other information

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of PLASTICA'S limited knowledge and belief, accurate, and reliable as of the date of authorisation of this safety data sheet. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to be satisfied as to the suitability and completeness of such information for the product as used.

Sources of data: Information from published literature and company data

Revision No. 2.0.0. Revised September 2018.
Changes made: Revised to conform to Revised Annex II in Regulation (EU) 2015/830 and to include Authorisation Number under the EU Biocides Regulation 528/2012 (EU BPR)

Revision No. 3.0.0. Revised December 2022.
Changes made: Updated to conform to latest version of REACH Annex II

Training advice

- Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

- Eye Dam. 1, H318: Classification based on calculation and concentration thresholds

SECTION 16: Other information (....)

- Aquatic Acute 1, H400: Classification based on calculation and concentration thresholds
- Aquatic Chronic 1, H410: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H302: Harmful if swallowed
- H318: Causes serious eye damage
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC_{50}: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC_{50}: Lethal Concentration, 50%
- LD_{50}: Lethal Dose, 50%
- NOAEC: No Observed Adverse Effect Concentration
- NOAEL: No Observed Adverse Effect Level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- STOT RE: Specific Target Organ Toxicity Repeated Exposure
- STOT SE: Specific Target Organ Toxicity Single Exposure
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---