

Safety Data Sheet

AQUAPAC

Water Treatment & Specialty Chemicals

Hazardous Chemical, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: **Copper sulfate**

Synonyms

copper sulfate
copper sulfate pentahydrate
copper sulphate

Product Code

Recommended use: Antimicrobial Water treatment

Supplier: Aquapac Pty Ltd
ABN: 36 114 118 311
Street Address: 88 Lee Holm Road
St Marys NSW 2760
Telephone: 02 9673 1192
Facsimile: 02 9673 1193

Emergency Telephone number: **1800 HELP**

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.



Signal Word

Warning

Hazard Classifications

Acute Toxicity - Oral - Category 4
Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Irritation - Category 2A
Acute Hazard to the Aquatic Environment - Category 1

Hazard Statements

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.

Prevention Precautionary Statements

P102 Keep out of reach of children.
P103 Read label before use.
P264 Wash hands, face and all exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves, eye/face protection and suitable respirator.

Response Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Product Name: **Copper sulfate**

Reference No: **COPPER SULFATE**

Issued: **2016-12-01**

Version: **2016.1**

Page 1 of 6

Safety Data Sheet

P302+P352	IF ON SKIN: Wash with plenty of soap and 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.
P321	Specific treatment (see product label).
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.

Storage Precautionary Statement

Not allocated

Disposal Precautionary Statement

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule:

DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Copper sulphate pentahydrate	7758-99-8	>98 %
Ingredients determined to be Non-Hazardous		Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Inhalation may irritate mucous membranes.

Skin Contact: Irritating to the skin.

Eye contact: Irritating to the eyes.

Ingestion: Ingestion may result in nausea.

Notes to physician: Treat symptomatically. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

Fire fighting further advice: Not applicable.

Safety Data Sheet

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapours or dust. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Clear area of all unprotected personnel. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of dust.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

National occupational exposure limits: Natural ventilation should be adequate under normal use conditions..

Personal Protection Equipment: GLOVES, SAFETY GLASSES, DUST MASK.

Wear gloves, safety glasses, dust mask. Available information suggests that gloves made from should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Crystalline Solid
Colour: Blue
Odour: Odourless

Solubility: Soluble in water and methanol
Density: 2.286g/cm³
Decomposition Point (°C): 560C
pH: 3.0-4.2 (5% solution)

(Typical values only - consult specification sheet)

Safety Data Sheet

AQUAPAC

Water Treatment & Specialty Chemicals

N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: Stable under normal ambient conditions, transport, storage, handling, and usage.

Conditions to avoid: Avoid contact with excessive moisture and iron objects, this product will corrode the iron.

Incompatible materials: Avoid strong reducing agents.

Hazardous decomposition products: Decomposes to form sulfur oxides; this will also occur under high heat (>560C) such as fire conditions.

Hazardous reactions: None known.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: May cause fever via metal inhalation.

Skin contact: Irritant.

Ingestion: Harmful if swallowed. May cause sore mouth/throat, abdominal pains, diarrhoea, vomiting, and nausea. Vomiting of green coloured material, gastric burning, haematic diarrhoea, hemolytic jaundice, hepatic and renal insufficiency, convulsions, and collapse may occur.

Eye contact: Irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >5 mg/L

LC50 (Rat): Due to large crystal size not inhalable, dust may be inhaled in trace amounts.

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as a Category 4 Hazard. Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

LD50 (Rat): 482mg/kg

Corrosion/Irritancy: Eye: this material has been classified as a Category 2A Hazard (reversible effects to eyes). Skin: this material has been classified as a Category 2 Hazard (reversible effects to skin).

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

Safety Data Sheet

AQUAPAC

Water Treatment & Specialty Chemicals

Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: Very toxic to aquatic life.

Long-term aquatic hazard: May cause long-term adverse effects in the environment.

Ecotoxicity: No information available.

Persistence and degradability: The product is partially biodegradable.

Bioaccumulative potential: Risk of bioaccumulation in an aquatic species is low.

Mobility: Low mobility in soil.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants)

The Rotterdam Convention (Prior Informed Consent)

Basel Convention (Hazardous Waste)

International Convention for the Prevention of Pollution from Ships (MARPOL)

Safety Data Sheet



16. OTHER INFORMATION

Reason for issue: Format change

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.