

## Safety Data Sheet **COPPER (II) CARBONATE BASIC Monohydrate**

SDS no. 9RKS6559 • Version 1.0 • Date of issue: 2024-01-30

### SECTION 1: Identification

#### GHS Product identifier

Product name COPPER (II) CARBONATE BASIC Monohydrate

#### Other means of identification

Copper (II) Carbonate Basic Monohydrate LR (Cupric hydroxide carbonate)	CL035-100G
Copper (II) Carbonate Basic Monohydrate LR (Cupric hydroxide carbonate)	CL035-500G
Copper (II) Carbonate Basic Monohydrate TG (Cupric hydroxide carbonate)	CT035-25KG

#### Recommended use of the chemical and restrictions on use

Fungicide for seed treatment, feed additive (in small amounts), pigments, pyrotechnics, insecticides, copper salts, colouring brass black, astringent in pomade preparations, antidote for phosphorus poisoning, smut preventive and laboratory reagent.

#### Supplier's details

Name ChemSupply Australia Pty Ltd  
Address 38-50 Bedford Street  
5013 Gillman South Australia  
Australia

Telephone 08 8440 2000  
email [www.chemsupply.com.au](http://www.chemsupply.com.au)

#### Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

### SECTION 2: Hazard identification

#### General hazard statement

Classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

#### Classification of the substance or mixture

#### GHS classification in accordance with: UN GHS revision 7

- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 4

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- Serious eye damage/eye irritation, Cat. 2A
- Hazardous to the aquatic environment, short-term (acute), Cat. 1
- Hazardous to the aquatic environment, long-term (chronic), Cat. 1

### GHS label elements, including precautionary statements

#### Pictograms



#### Signal word

#### Warning

#### Hazard statement(s)

H302	Harmful if swallowed
H319	Causes serious eye irritation
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

#### Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell,
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container to an approved waste disposal facility

## SECTION 3: Composition/information on ingredients

#### Mixtures

Molecular weight: 239.13

#### Components

Component	CAS no.	Concentration
Copper (II) Carbonate, Basic Monohydrate (EC no.: 235-113-6; Index no.: 029-020-00-8)	12069-69-1	100 % (weight)
CLASSIFICATIONS: Acute toxicity, inhalation, Cat. 4; Acute toxicity, oral, Cat. 4; Serious eye damage/eye irritation, Cat. 2A; Hazardous to the aquatic environment, short-term (acute), Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 1. HAZARDS: H302 - Harmful if swallowed; H319 - Causes serious eye irritation; H332 - Harmful if inhaled; H400 - Very toxic to aquatic life; H410 - Very toxic to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: M=10		

## SECTION 4: First-aid measures

#### Description of necessary first-aid measures

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General advice	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Consult a physician.
In case of skin contact	Immediately remove contaminated clothing and wash affected area with water for at least 15 minutes. Ensure contaminated clothing is washed before re-use. Seek medical advice /attention depending on the severity.
In case of eye contact	Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. In all cases of eye contamination it is a sensible precaution to seek medical advice.
If swallowed	Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist.

#### Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

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## SECTION 5: Fire-fighting measures

#### Suitable extinguishing media

Use measures suitable for extinguishing surrounding fire.

#### Specific hazards arising from the chemical

Irritating, toxic and corrosive fumes and vapours, including copper fumes and oxides of copper. Contact with metals may evolve flammable hydrogen gas.

Material does not burn. Fire or heat will produce irritating, poisonous and/or corrosive gases. Runoff may pollute waterways.

#### Special protective actions for fire-fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

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## SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Avoid substance contact. Avoid generation of dusts: do not inhale dusts.

Ensure supply of fresh air in enclosed rooms.

Use personal protective equipment listed in Section 8.

#### Methods and materials for containment and cleaning up

Sweep up (avoid generating dust) and remove to a suitable, clearly labelled container for disposal in accordance with local regulations.

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Prevent from entering into drains, ditches, rivers or the sea.

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## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin, eyes and clothing. Wash hands and face thoroughly after working with material. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Keep container tightly closed when not in use.

### Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well-ventilated place. Keep containers securely sealed and protected against physical damage.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### CAS: (not specified)

Copper, dusts and mists (as Cu)

AU/SWA (Australia): 1 mg/m<sup>3</sup> TWA inhalation

### Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

### Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

#### Skin protection

Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and maintenance.

#### Body protection

Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

#### Respiratory protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

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## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

Physical state

Solid

Appearance

Green powder.

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Color	No data available.
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	200 °C (decomposition)
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	200 °C
Oxidizing properties	No data available.
pH	8 - 9 (50 g/L, H <sub>2</sub> O, 20 °C) (slurry)
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Insoluble. Solubility in Organic Solvents: Practically insoluble in alcohol. Soluble in acids, dilute acids and ammonia.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	Specific Gravity: 4
Relative vapor density	No data available.
Particle characteristics	No data available.

#### Supplemental information regarding physical hazard classes

No data available.

#### Further safety characteristics (supplemental)

No data available.

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## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable under ordinary conditions of use and storage.

### Possibility of hazardous reactions

Copper salts and hydrazine react explosively, violent reactions with nitro-methane, sodium hypobromite, acetylene, strong acids, strong oxidants. Any reaction in which cuprous hydride, cuprous nitride or cupric phosphinate are produced will be hazardous and may cause an explosion.

Hazardous Polymerization: Will not occur.

### Conditions to avoid

Dust generation, excess heat, exposure to moist air/moisture or water, light and incompatible materials.

### Incompatible materials

Hydrazine, strong acids, strong oxidiser.

### Hazardous decomposition products

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Irritating, toxic and corrosive fumes and vapours, including copper fumes and oxides of copper may be released when heated to decomposition. Contact with metals may evolve flammable hydrogen gas.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Acute Toxicity - Oral: LD50 (rat): 1350 mg/kg.

Ingestion: May cause burning pain in the mouth, esophagus, and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, dizziness, metallic taste, and diarrhea may occur. If vomiting does not occur immediately systemic copper poisoning may occur. Symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous excitation followed by depression, jaundice, convulsions, blood effects, paralysis and coma. Death may occur from shock or renal failure.

Inhalation: Causes irritation to respiratory tract, symptoms may include coughing, sore throat, and shortness of breath. May result in ulceration and perforation of respiratory tract. When heated, this compound may give off copper fume, which can cause symptoms similar to the common cold, including chills and stuffiness of the head.

#### Skin corrosion/irritation

May cause irritation with redness and pain. Contact with extensively burned skin may cause poisoning.

#### Serious eye damage/irritation

May cause irritation, redness, pain, blurred vision, and discoloration. May produce corneal opacity, inflammation, and conjunctivitis.

#### Respiratory or skin sensitization

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

No data available.

#### Reproductive toxicity

No data available.

#### Summary of evaluation of the CMR properties

No data available.

#### Specific target organ toxicity (STOT) - single exposure

No data available.

#### Specific target organ toxicity (STOT) - repeated exposure

No data available.

#### Aspiration hazard

No data available.

#### Additional information

Chronic Effects: Prolonged or repeated skin exposure may cause dermatitis. Prolonged or repeated exposure to dusts of copper salts may cause discolouration of the skin or hair, blood and liver damage, ulceration and perforation of the nasal septum, runny nose, metallic taste, atrophic changes and irritation of the mucous membranes, unconsciousness or death. Chronic copper poisoning is characterised by

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hepatic cirrhosis, brain damage and demyelination, kidney defects and copper deposition in the cornea as demonstrated via Wilson's disease.

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## SECTION 12: Ecological information

### Toxicity

Toxic to the aquatic environment

### Mobility in soil

No mobility data available for this product.

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## SECTION 13: Disposal considerations

### Disposal methods

### Product disposal

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

### Other disposal recommendations

Do not discharge this material into waterways, drains and sewers.

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## SECTION 14: Transport information

### ADG (Road and Rail)

UN Number: 3077

Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains COPPER (II) CARBONATE BASIC)

### Hazchem emergency action code (EAC)

2Z

### IMDG

UN Number: 3077

Class: 9

Packing Group: III

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains COPPER (II) CARBONATE BASIC)

### IATA

UN Number: 3077

Class: 9

Packing Group: III

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## SECTION 15: Regulatory information

### Safety, health and environmental regulations specific for the product in question

### Australia SUSMP

Poison Schedule: S6

**SECTION 16: Other information****Further information/disclaimer**

ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

**Preparation information**

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia

National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'

Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.

Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.

Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants, December 2019

Safe Work Australia, Hazardous Chemical Information System (HCIS), [hcis.safeworkaustralia.gov.au](http://hcis.safeworkaustralia.gov.au)

IATA, Dangerous Goods Regulations (DGR)

IMO, International Maritime Dangerous Goods Code (IMDG)