

SAFETY DATA SHEET



Revision date: 14-Nov-2023

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name COPPER CARBONATE GMP

Product Code(s) 000000027106

Other means of identification

UN number 3077

CAS No. 12069-69-1

Chemical name Copper, [carbonato(2-)]dihydroxydi-

Synonyms Copper carbonate basic

Pure substance/mixture Substance

Recommended use of the chemical and restrictions on use

Recommended use Animal nutrition.

Uses advised against No information available

Supplier

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Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Serious eye damage/eye irritation	Category 2 - (H319)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

SIGNAL WORD

Warning

Label elements

Exclamation mark

Environment

**Hazard statements**

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Avoid breathing dust / fume / gas / mist / vapours / spray

Use only outdoors or in a well-ventilated area

Wear protective gloves / protective clothing / eye protection / face protection

Avoid release to the environment

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Collect spillage

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

Very toxic to aquatic life

Poisons Schedule (SUSMP)

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%
Basic copper carbonate	12069-69-1	100

4. FIRST AID MEASURES**Description of first aid measures**

General advice	Show this safety data sheet to the doctor in attendance. For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get immediate medical advice/attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. Call a physician if symptoms occur.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.
Self-protection of the first aider	Avoid contact with skin, eyes, and clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing dust / fume / gas / mist / vapours / spray. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Symptoms may be delayed.

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media**

Suitable Extinguishing Media Fine water spray. Foam. Dry chemical or CO₂.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Non-combustible. Decomposes on heating emitting toxic fumes. In the event of fire, cool tanks with water spray. Environmentally hazardous. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Oxides of carbon.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Hazchem code 2Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes, and clothing. Use personal protective equipment as required. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. Do not touch or walk through spilled material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wash thoroughly after handling.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material.

Methods for cleaning up Cover with damp absorbent (inert material, sand or soil). Vacuum or sweep material and place in a disposal container. Avoid generation of dust. Use personal protective equipment as required. Pick up and transfer to properly labelled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Avoid breathing dust / fume / gas / mist / vapours / spray. Avoid generation of dust. Ensure adequate ventilation. Use personal protection equipment. Use according to package label instructions.

General hygiene considerations Avoid contact with skin, eyes, and clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid breathing dust / fume / gas / mist / vapours / spray. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from foodstuffs. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

Incompatible materials Strong oxidizing agents. Acids.

Poisons Schedule (SUSMP) 6

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	Australia	ACGIH TLV
Basic copper carbonate 12069-69-1		TWA: 1 mg/m ³ Cu dust and mist

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.



Eye/face protection

If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection

Wear suitable protective clothing. Boots. Overalls.

Hand protection

Impervious gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	No information available
Color	Blue Green
Odor	Odourless
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	Insoluble in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Excessive heat.

Incompatible materials

Incompatible materials Strong oxidizing agents. Acids.

Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	Harmful by inhalation. May cause irritation of respiratory tract.
Eye contact	Causes serious eye irritation. May cause redness, itching, and pain.
Skin contact	May cause irritation.
Ingestion	Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Symptoms	May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Numerical measures of toxicity - Product Information

No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Basic copper carbonate	= 1495 mg/kg (Rat) = 1350 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 1.2 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No known effect.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitization	No known effect.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Chronic effects:	Systemic effects of copper compounds include: widespread capillary damage, kidney and

liver injury, central nervous system excitation followed by depression, jaundice (yellowing of the skin and whites of the eyes), pain over the liver, methaemoglobinemia (where more than 1% of the haemoglobin in the blood has been oxidised to the form which is unable to carry oxygen), haemolytic anaemias (a reduced number of circulating red blood cells due to their destruction), circulatory shock and these may lead to renal tubular injury and death in renal failure.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects. Fungicidal effect. Keep out of waterways. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

14. TRANSPORT INFORMATION

ADG

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

UN number	3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER CARBONATE)
Hazard class	9
Packing group	III
Environmental hazard	Yes
Hazchem code	2Z

IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 3077
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER CARBONATE)
Transport hazard class(es) 9
Packing group III

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 3077
UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER CARBONATE)
Transport hazard class(es) 9
Packing group III
IMDG EMS Fire F-A
IMDG EMS Spill S-F
Marine pollutant Yes

15. REGULATORY INFORMATION

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

National regulations

Australia

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule (SUSMP) 6

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Basic copper carbonate - 12069-69-1	10 tonne/yr Threshold category 1 2000 tonne/yr Threshold category 2b 60000 MWH Threshold category 2b 20 MW Threshold category 2b

International Inventories

AIIC

This material is listed on the Australian Inventory of Industrial Chemicals.

Legend:

AIC- Australian Inventory of Industrial Chemicals

International Regulations**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable**16. OTHER INFORMATION****Reason(s) For Issue:** First Issue Primary SDS**Issuing Date:** 14-Nov-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian Industrial Chemicals Introduction Scheme (AICIS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 RTECS (Registry of Toxic Effects of Chemical Substances)
 World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

End of Safety Data Sheet