

Visual  
cuts 2004

Copper Carbonate (CuCO<sub>3</sub>•Cu(OH)<sub>2</sub>)

DATE PREPARED: November 17, 1995

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT IDENTIFICATION**

Product Name: Copper Carbonate (CuCO<sub>3</sub>•Cu(OH)<sub>2</sub>)

**HAZARD CLASSIFICATION (0-minimal, 1-slight, 2-moderate, 3-serious, 4-severe)**

NFPA: HEALTH-2 FIRE-1 REACTIVITY-0  
 HMIS: HEALTH-2 FIRE-1 REACTIVITY-0

**MANUFACTURER**

Company Name: Griffin Corporation  
 Address: PO Box 1847, Rocky Ford Road  
 Valdosta, GA 31603-1847  
 Emergency Phone #: (800) 237 1854  
 CHEMTREC: (800) 424 9300

**2. COMPOSITION/ INFORMATION ON INGREDIENTS**

Component Name	% by Wt.	CAS#	TLV (ACGIH)	PEL (OSHA)
Copper carbonate	96.0	12069-69-1	1 mg/m <sup>3</sup> *	1 mg/m <sup>3</sup> *
Inert Ingredients	4.0%		none estab	none estab

\* As copper dusts or mists (CAS # 7440-50-8).

**3. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Light green to slightly grey in color. Irritating to the skin, eyes, and respiratory system. See below for route-specific details.

**POTENTIAL HEALTH EFFECTS**

**Inhalation:** May cause irritation of the mucous membranes. Exposure to copper fumes may result in metallic taste, nausea, vomiting, and metal fume fever with chills, fever, aching muscles, dry throat and headache.

**Eye Irritation:** May cause severe irritation with redness, pain and blurred vision.

**Skin Irritation:** Slight skin irritant. Excessive exposure, especially if prolonged, may produce skin irritation. Repeated exposure may cause allergic contact dermatitis.

**Ingestion:** Ingestion of copper salts may result in irritation of the gastrointestinal tract, nausea, vomiting, salivation, gastric pain, hemorrhagic gastritis, diarrhea, capillary damage, liver and kidney damage, and central nervous system stimulation followed by depression. Jaundice, pain in the liver, and hemolytic anemia have been reported following acute human poisonings.

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## Hazards Identification continued:

## Chronic:

Repeated or prolonged inhalation of dust, mist or fumes of copper and copper salts may cause irritation of the upper respiratory tract and occasionally ulceration and perforation of the nasal septum. Depending on concentration and duration of contact, repeated or prolonged exposure to the eyes may result in symptoms as in acute exposure. Repeated or prolonged exposure may cause dermatitis. Rarely, sensitization to copper may occur. Repeated ingestion of copper salts may result in anemia, liver and kidney damage.

## 4. FIRST AID MEASURES

## Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. Get medical attention immediately.

## Eye Contact:

Hold eyelids open and flush with water, until no evidence of chemical remains (at least 15 - 20 minutes). Get medical attention.

## Skin Contact:

Remove contaminated clothing and shoes. Wash with plenty of soap and water until no evidence of chemical remains (approximately 15 - 20 minutes). Get medical attention.

## Ingestion:

Unless extensive vomiting has occurred, empty the stomach by gastric lavage with water, milk, sodium bicarbonate solution of a 0.1% solution of potassium ferrocyanide. (Gosselin, *Clinical Toxicology of Commercial Products*, 5th Ed.). Administration of gastric lavage should be performed by qualified medical personnel. Probable mucosal damage may contraindicate use of gastric lavage.

## 5. FIRE FIGHTING MEASURES

## Flash Point &amp; Method:

Noncombustible.

## Flammable Limits:

No data.

## Autoignition Temperature:

No data.

## FIRE FIGHTING HAZARDS &amp; PROCEDURES

## General Hazard:

Negligible fire hazard when exposed to heat or flame. Prevent human exposure to fire, smoke, fumes or products of combustion.

## Extinguishing Media:

Use dry chemical, carbon dioxide, water spray, or foam.

## Fire Fighting Equipment:

Wear protective clothing and self-contained breathing apparatus.

## Hazardous Combustion

## Products:

Thermal decomposition may release toxic and/or hazardous gases.

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**6. ACCIDENTAL RELEASE MEASURES**

Land Spill:	Sweep up and place in suitable (fiberboard) containers for later disposal.
Water Spill:	If feasible, copper may be precipitated/ultrafiltrated with caustics or other chemicals and resulting sludge disposed of in a chemical landfill.

**7. HANDLING AND STORAGE**

Storage Temperature:	Store below 35°C (95°F).
General Information:	Store in a clean, dry area. Do not store near feed, food or within the reach of children.

**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

Ventilation:	Control enclosed spaces with adequate ventilation to prevent exceedance of ACGIH TLV or OSHA PEL (1 mg/m <sup>3</sup> ).
Respiratory Protection:	In enclosed spaces where the TLV or PEL may be exceeded, wear NIOSH/MSHA approved dust or mist respirator.
Eye Protection:	Wear protective eyewear to prevent contact with this substance.
Protective Clothing:	Applicators and other handlers must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance. Use impervious gloves, arm covers and apron.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Vapor Pressure:	<1.0 mm/Hg @ 25° C
Specific Gravity:	No data
Solubility in Water:	Insoluble - 0.005 g/100 mls H <sub>2</sub> O @ 25° C
pH:	Neutral in water
Boiling Point:	No data
Melting Point:	Decomposes above 200°C
Odor:	None
Color:	Light green with a slight grey tint
Physical State:	Water insoluble powder
Bulk Density:	35-45 lbs/ft <sup>3</sup>

**10. STABILITY AND REACTIVITY**

General:	This material is stable under normal conditions.
Incompatible Materials:	No data.
Hazardous Decomposition:	Thermal decomposition may release toxic and/or hazardous gases.
Hazardous Polymerization:	Will not occur

MATERIAL SAFETY DATA SHEET

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1. TOXICOLOGICAL INFORMATION

ACUTE

Inhalation:	No data available
Eye Irritation:	May cause severe eye irritation.
Skin Irritation:	May cause slight skin irritation.
Skin Absorption	Acute dermal LD <sub>50</sub> >2000 mg/kg.
Ingestion:	Oral LD <sub>50</sub> = 625 to 1250 mg/kg.

CHRONIC

Repeated ingestion of copper salts may results in anemia, liver, and kidney damage. Chronic inhalation exposure may cause a metallic taste in the mouth, irritation of the upper respiratory tract such as the nasal mucosa that may progress to perforation of the nasal septum. Chronic cough may also occur.

Special Health Effects: Copper-intolerant individuals should not be exposed to this material. No additional information is available on whether overexposure to this material would aggravate other existing special medical conditions.

12. ECOLOGICAL INFORMATION

For detailed ecological information, write to the address listed in Section 1 of this MSDS or call 912/242-8635 and ask for Regulatory Affairs.

13. DISPOSAL CONSIDERATIONS

Comply with appropriate disposal regulations. Landfill solids at permitted sites. Use registered transporters. Do not flush to surface water or sanitary sewer system.

14. TRANSPORT INFORMATION

Department of Transportation (DOT):	Not Regulated
International Air Transport Association (IATA):	Not Regulated
International Maritime Organization (IMO):	Not Regulated

15. REGULATORY INFORMATION

OSHA	This product is considered hazardous under the OSHA Hazardous Communication Standard (29 CFR 1910.1200). All product components are on the TSCA Chemical Inventory. Releases of a component of this material (metallic copper) to air, land, or water are reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.
TSCA:	
CERCLA	

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Regulatory Information continued

## RCRA

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33.

## SARA TITLE III

## 311/312 Hazard Categories:

This product is a hazardous chemical under 29 CFR 1910.1200 and is categorized as a delayed health hazard.

## 313 Reportable Ingredients

This product contains a percentage of metallic copper (CAS 7440-30-8) which is listed in Section 313 above de minimis concentrations.

**16. OTHER INFORMATION**

## REVISION SUMMARY

This MSDS replaces the one dated 09/95. This MSDS was revised (ANSI Z400.1 format) to include additional data in Section 15.

The information in this Material Safety Data Sheet relates to this specific material. It may not be valid for this material if used in combination with any other materials or in any process. It is the users' responsibility to satisfy themselves as to the suitability and completeness of this information for their own particular use.