



SAFETY DATA SHEET

Issue Date 30-Apr-2013

Revision Date 30-Jul-2018

Version 5

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Emerald-C

Other Means of Identification

SDS # OBC-011

Synonyms

Basic Copper Carbonate, Copper (II) Carbonate Hydroxide (2:1:2); Copper (carbonate (2-1)) dihydroxydi-; Copper (II) carbonate; Copper Carbonate Hydroxide

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Animal Feed

Details of the Supplier of the Safety Data Sheet

Manufacturer Address

Old Bridge Chemicals, Inc.
554 Waterworks Rd.
Old Bridge, NJ 08857

Emergency Telephone Number

Company Phone Number

(732) 727-2225 (normal business hours)
(800) 275-3924 (24 hour number)

Emergency Telephone

Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Appearance Fine green powder

Physical state Solid

Odor Odorless

Classification

Acute toxicity - Oral	Category 4
Serious eye damage/eye irritation	Category 2
Acute Toxicity - Dermal	Category 4

Signal Word

Warning

Hazard statements

Harmful if swallowed or inhaled
Harmful in contact with skin
Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear eye protection/ face protection
 Wear protective gloves/clothing

Precautionary Statements - Response

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
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth
 If on skin: wash with plenty of soap and water.
 Take off contaminated clothing and wash before reuse.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Basic Copper Carbonate, Copper (II) Carbonate Hydroxide (2:1:2); Copper (carbonate(2-1)) dihydroxydi-; Copper (II) carbonate; Copper Carbonate Hydroxide.

Chemical Name	CAS No	Weight-%
Basic Copper Carbonate	12069-69-1	97-100

4. FIRST AID MEASURES

First Aid Measures

Eye Contact Immediately flush eyes with gentle but large amount of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.

Skin Contact Wash affected areas thoroughly with soap and water for at least 15 minutes. Remove and wash contaminated clothing before reuse. Get medical attention.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician.

Ingestion Induce vomiting, but only if victim is fully conscious. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms Swallowing: may cause burning pain in mouth, esophagus and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, 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 could occur from shock or renal failure.

Skin Contact: Certain individuals may have skin sensitivity to copper. May cause irritation with redness and pain.

Eye Contact: May cause irritation, redness, pain, blurred vision and discoloration. May cause corneal opacity, inflammation and conjunctivitis.

Inhalation: May cause irritation to upper respiratory tract. Symptoms 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.

Chronic Exposure: Prolonged or repeated skin exposure may cause dermatitis. Prolonged exposure to dusts of copper salts may cause discoloration of the skin or hair, blood or liver damage, ulceration and perforation of the nasal septum, runny nose, metallic taste and atrophic changes and irritation of the mucous membranes.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO₂, water spray or regular foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

This product does not sustain combustion.

Protective Equipment and Precautions for Firefighters

Firefighters wear protective clothing and self-contained breathing apparatus. May be an explosion hazard when mixed with incompatibles. See Section 10 for incompatible materials.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Dike far ahead of spill to collect runoff water.

Methods for Cleaning Up Keep in suitable, closed containers for disposal. Prevent run off to storm sewers and ditches leading to natural waterways.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines No exposure limits noted for ingredient(s)

Appropriate Engineering Controls

Engineering Controls Local exhaust and mechanical ventilations are recommended to be used as engineering controls. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Use chemical safety goggles and/or full-face shield where dusting is possible.

Skin and Body Protection Wear protective gloves and protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Remarks • Method

Physical State	Solid
Appearance	Fine green powder
Color	Green
<u>Property</u>	<u>Values</u>
pH	Not Applicable
Melting Point/Freezing Point	200 °C / 392 °F
Boiling Point/Boiling Range	Not Applicable
Flash Point	Not Applicable
Evaporation Rate	Not Applicable
Flammability (Solid, Gas)	Not determined
Upper Flammability Limits	Not determined
Lower Flammability Limit	Not determined
Vapor Pressure	Not Applicable
Vapor Density	Not Applicable
Specific Gravity	4.0
Water Solubility	Insoluble in water
Solubility in Other Solvents	Soluble in acids
Partition Coefficient	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	May be an explosion hazard when mixed with incompatibles See Section 10 for incompatible materials
Oxidizing Properties	Not determined
Odor	Odorless
Odor Threshold	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None under normal use conditions. Acrid smoke and fumes emitted if heated to decomposition. Smoke may be acrid and fumes irritating.

11. TOXICOLOGICAL INFORMATION**Information on Likely Routes of Exposure****Product Information****Eye Contact**

Avoid contact with eyes.

Skin Contact

Avoid contact with skin.

Inhalation

Avoid inhalation of dust.

Ingestion

Do not taste or swallow.

Component Information

Not available

Information on Physical, Chemical and Toxicological Effects**Symptoms**

Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure**Carcinogenicity**

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information Not available

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements. With prior approval the material can be returned to the manufacturer.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA

Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations**SARA 311/312 Hazard Categories**

Acute health hazard

Yes

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Copper Carbonate - 12069-69-1	12069-69-1	100	55-57

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Copper Carbonate - 12069-69-1	x

U.S. State Right-to-Know Regulations

Not Determined

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards Not determined
	3	0	0	Personal
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Protection Not determined
	3	0	0	

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet