

# Safety Data Sheet

Issue Date: 10-Oct-2012

Revision Date: 03-Aug-2018

Version 2

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Multi-Com Granular Copper 5%

### Other means of identification

**SDS #** VLS-008R1

**UN/ID No** UN3077

**Other Information** Factory Formula: 01198.

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

**Recommended Use** Plant Nutrients.

### Details of the supplier of the safety data sheet

#### Supplier Address

Verdesian Life Sciences, U.S., LLC.  
1001 Winstead Drive, Suite 480  
Cary, NC 27513

### Emergency Telephone Number

**Company Phone Number** Business Phone: (800) 868-6446

Fax: (919) 535-3652

**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Dark colored pellets

**Physical state** Solid Dry material

**Odor** No odor

### Classification

Pellets / Granulars are waxed coated. This coating reduces the risk of occupational exposures to skin, eye and respiratory tract.

Acute toxicity - Oral

Category 4

### Signal Word

Warning

### Hazard statements

Harmful if swallowed



### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

### Precautionary Statements - Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Rinse mouth

**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

Chemical Name	CAS No.	Weight-%
Copper sulfate pentahydrate	7758-99-8	15

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST AID MEASURES

**First Aid Measures**

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes.
<b>Inhalation</b>	Remove to fresh air. If breathing becomes difficult, call a physician.
<b>Ingestion</b>	Drink large volumes of milk or water. Call a physician or poison control center immediately. Induce vomiting only if advised by medical personnel.

**Most important symptoms and effects**

<b>Symptoms</b>	Direct contact may cause skin or eye irritation. Inhalation may aggravate respiratory problems. Ingestion may result in nausea, vomiting, diarrhea, blood in vomit and stools, burning pain in mouth and throat, abdominal pain, lethargy, confusion, edema, leukocytosis, hyperglycemia, acidosis, shock, liver and kidney damage, and other gastrointestinal and neuralgic symptoms and damage. Ingestion by a child of more than 60 ml (2 ounces) or by an adult of more than 150 ml (5 ounces) may be fatal.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

None.

**Hazardous Combustion Products** May release toxic oxides of Zinc and Sulfur in a fire.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Use personal protective equipment as required.

### Environmental precautions

**Environmental precautions** See Section 13: DISPOSAL CONSIDERATIONS.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Neutralize with suitable material, such as slaked lime or sodium bicarbonate. Neutralized residues may be permitted to be flushed with water to sanitary sewer. Check with local authorities before flushing to sewer. Follow all Federal, State and Local regulations.

## 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 or clothing. Use personal protection recommended in Section 8. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store at 32°F - 105°F. Protect from direct sunlight. Keep out of the reach of children.

**Incompatible Materials** Strong alkalis.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Copper sulfate pentahydrate 7758-99-8	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> Cu dust and mist

### Appropriate engineering controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

### Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Safety goggles.

**Skin and Body Protection** Wear neoprene or other acid resistant gloves. Chemically resistant apron, boots, and gloves or rubber rain suit is recommended.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.

**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

<b>Physical state</b>	Solid Dry material	<b>Odor</b>	No odor
<b>Appearance</b>	Dark colored pellets	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Dark Colored Liquid		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	Not applicable	
<b>Melting point / freezing point</b>	Not applicable	
<b>Boiling Point / Boiling Range</b>	Not applicable	
<b>Flash Point</b>	Not applicable	
<b>Evaporation Rate</b>	Not applicable	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Flammability Limit in Air</b>		
<b>Upper Flammability Limit</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not known	
<b>Vapor Density</b>	Not known	
<b>Relative Density</b>	Not determined	
<b>Water Solubility</b>	~98%	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Autoignition temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	Not determined	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

### Other Information

<b>Bulk Density</b>	47 lb/cu. ft.
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## 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.

<b>Hazardous Polymerization</b>	No information available.
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### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Strong alkalis.

### Hazardous Decomposition Products

May release toxic oxides of Zinc and Sulfur in a fire.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Avoid inhalation of dust.
<b>Ingestion</b>	Harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Copper sulfate pentahydrate 7758-99-8	= 472 mg/kg ( Rat )	> 2 g/kg ( Rat ) > 8 g/kg ( Rabbit )	> 2.95 mg/L (Rat)

### 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** Based on the information provided, 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

Very toxic to aquatic life with long lasting effects.

### Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Copper sulfate pentahydrate 7758-99-8		0.09 - 0.19: 96 h Oncorhynchus mykiss mg/L LC50 static 0.96 - 1.8: 96 h Lepomis macrochirus mg/L LC50 static 0.6752: 96 h Pimephales promelas mg/L LC50 static 0.66 - 1.15: 96 h Lepomis macrochirus mg/L LC50 semi-static 0.1478 - 0.165: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	0.147 - 0.227: 48 h Daphnia magna mg/L EC50 Static

### Persistence/Degradability

Not determined.

### Bioaccumulation

Not determined.

### Mobility

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Copper sulfate pentahydrate 7758-99-8	Toxic

**14. TRANSPORT INFORMATION**

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

**DOT**

<b>UN/ID No</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally Hazardous Substance, solid, n.o.s. (Cupric Sulfate)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes.

**IATA**

<b>UN/ID No</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally Hazardous Substance, solid, n.o.s. (Cupric Sulfate)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Description</b>	Yes

**IMDG**

<b>UN/ID No</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally Hazardous Substance, solid, n.o.s. (Cupric Sulfate)
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Yes

**15. REGULATORY INFORMATION****International Inventories**

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Copper sulfate pentahydrate	X				X		X	X

**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  
*AICS* - Australian Inventory of Chemical Substances

**US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Copper sulfate pentahydrate 7758-99-8	10 lbs	10 lbs	10 lbs

**SARA 313**

Chemical Name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Copper sulfate pentahydrate - 7758-99-8	7758-99-8	15	1.0

**CWA (Clean Water Act)**

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper sulfate pentahydrate		X		

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Copper sulfate pentahydrate 7758-99-8	X		X

**16. OTHER INFORMATION****NFPA****Health Hazards**

Not determined

**Flammability**

Not determined

**Instability**

Not determined

**Special Hazards**

Not determined

**HMIS****Health Hazards**

Not determined

**Flammability**

Not determined

**Physical hazards**

Not determined

**Personal Protection**

Not determined

**Issue Date:**

10-Oct-2012

**Revision Date:**

03-Aug-2018

**Revision Note:**

Regulatory review

**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**