



# SAFETY DATA SHEET

Issue Date 30-Apr-2013

Revision Date 01-May-2013

Version 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Basic Copper Sulfate

### Other Means of Identification

**SDS #** OBC-004

**Synonyms** Tri-Basic Copper Sulfate, Copper Sulfate Basic, Fixed Copper

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** For industrial use.

### 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

### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Appearance** Bluish-green fine powder

**Physical State** Solid

**Odor** Odorless

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Synonyms** Tri-Basic Copper Sulfate, Copper Sulfate Basic, Fixed Copper.

Chemical Name	CAS No	Weight-%
Basic Copper Sulfate	1344-73-6	99
Inert	Proprietary	1

#### 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 skin thoroughly with mild soap and water. Remove and wash contaminated clothing before reuse. Get medical attention if necessary.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	Drink plenty of water or milk immediately. 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.

##### Most Important Symptoms and Effects, both Acute and Delayed

<b>Symptoms</b>	Inhalation of dust may cause mechanical irritation to the respiratory tract. May cause nausea, vomiting, stomach ache, and diarrhea. May cause severe eye irritation. Causes substantial, but temporary eye damage. May be corrosive to eyes. May cause skin sensitivity.
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##### Indication of any Immediate Medical Attention and Special Treatment Needed

<b>Note to Physicians</b>	Treat symptomatically.
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#### 5. FIRE-FIGHTING MEASURES

##### Suitable Extinguishing Media

Dry chemical, CO<sub>2</sub>, 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

May burn but does not ignite.

**Hazardous Combustion Products** If dry heated above 300°C/ 572°F toxic SO<sub>2</sub> may evolve.

##### 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

<b>Personal Precautions</b>	Use personal protection recommended in Section 8.
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##### Methods and Material for Containment and Cleaning Up

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Keep in suitable, closed containers for disposal. Do not wash powder away. Recover dry if possible. If product is in a confined solution, pump into a chemical waste container.

## 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

Mixing with acid will solubilize product producing water soluble products.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Basic Copper Sulfate 1344-73-6	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. Use adequate exhaust ventilation to prevent inhalation of product vapors.  
Maintain eyewash / safety shower stations in areas where chemical is handled.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/Face Protection

Chemical anti-spash safety goggles.

#### Skin and Body Protection

Wear suitable gloves. Wear suitable protective clothing.

#### Respiratory Protection

Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded.

**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

Physical State	Solid	Odor	Odorless
Appearance	Bluish-green fine powder	Odor Threshold	Not determined
Color	Blue-green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not Applicable	
Melting Point/Freezing Point	300 °C / 572 °F	
Boiling Point/Boiling Range	Not Applicable	
Flash Point	Not Applicable	
Evaporation Rate	Not Applicable	
Flammability (Solid, Gas)	Not Flammable	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not Applicable	
Vapor Density	Not Applicable	
Specific Gravity	Not determined	

<b>Water Solubility</b>	Insoluble in water
<b>Solubility in Other Solvents</b>	Soluble in acids
<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

## 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

May burn but does not ignite.

### Incompatible Materials

Mixing with acid will solubilize product producing water soluble products.

### Hazardous Decomposition Products

If heated above 570°C/ 1058°F product can decompose to emit toxic fumes of oxide and sulfur.

## 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

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Inert	> 90 mL/kg ( 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**

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**

Toxic to fish and plants. Daphnia LC50 = In excess of 320 ug/l.

**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**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not reuse container. 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.

Chemical Name	California Hazardous Waste Status
Basic Copper Sulfate 1344-73-6	Toxic

**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

Not Determined

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDL - 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 %
Basic Copper Sulfate - 1344-73-6	1344-73-6	99	1.0

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Basic Copper Sulfate 1344-73-6 ( 99 )		X		

### US State Regulations

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Basic Copper Sulfate 1344-73-6	X		X

**16. OTHER INFORMATION**

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

Issue Date 30-Apr-2013  
Revision Date 01-May-2013  
Revision Note New format

**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**