



## Material Safety Data Sheet

NFPA	HMIS	PPE	Symbol(s)						
	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0		
Health Hazard	1								
Fire Hazard	1								
Reactivity	0								

Preparation Date June 2011

Revision Date 23-November-2011

Revision Number 1

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Description:** Copr Plus  
**MSDS #:** 0070 377G  
**Recommended Use** For industrial use only

**Manufacturer**  
 Bestolife Corporation  
 2777 Stemmons Freeway, Suite 1800  
 Dallas, Texas 75207  
 USA  
 Internet: www.bestolife.com

**Telephone Number**  
 (214) 631-6070

**Emergency Telephone Number** CHEMTREC: 800-424-9300 or 703-527-3887 (Transportation Emergencies; 24-hours/day)

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

<b>Appearance</b> Copper-black	<b>Physical State</b> Solid.	<b>Odor</b> Petroleum odor.
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#### Potential Health Effects

#### Principle Routes of Exposure

The two major means of exposure are skin absorption and ingestion.

#### Acute Effects

##### Eyes

Contact with eyes may cause irritation.

##### Skin

Skin contact may cause irritation.

##### Inhalation

Not an expected route of entry.

##### Ingestion

This product may be absorbed by the digestive system. Ingestion can result in both acute and chronic overexposure.

#### Chronic Effects

Prolonged and repeated contact with the product may cause a defatting of the skin, dermatitis, folliculitis and/or oil acne.

#### See Section 11 for additional Toxicological information.

#### Aggravated Medical Conditions

Preexisting eye or skin disorders may be aggravated by prolonged contact with this product.

Potential Environmental Effects No information available.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Lubricating greases	74869-21-9	40-70
Copper	7440-50-8	7-13
Lime	1305-78-8	1-5

Other Non-Hazardous Ingredients  
Contains: <3% DMSO-extractable components

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Flush with copious amounts of water. Get immediate medical attention.
<b>Skin Contact</b>	Wash thoroughly with soap and water. If irritation occurs, get medical attention.
<b>Inhalation</b>	Remove from exposure. Get medical attention if experiencing cough, irritation or difficult breathing.
<b>Ingestion</b>	Get immediate medical attention. DO NOT INDUCE VOMITING! Possible aspiration hazard.
<b>Notes to Physician</b>	The hydrocarbons contained in this product are mild irritants of the eyes and mucous membranes, central nervous system depressants, and primary chemical irritants of the skin. Prolonged or repeated skin contact, especially with poor personal hygiene, may cause skin disorders. For combustion product effects see Hazardous Combustion Products in Section 5. Fire-Fighting Measures.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	No information available
<b>Suitable Extinguishing Media</b>	Dry chemical, water fog, foam, or carbon dioxide may be suitable for extinguishing fires involving this product.
<b>Unsuitable extinguishing media.</b>	No information available
<b>Explosion Limits</b>	
<b>Hazardous Combustion Products</b>	Combustion products are highly dependent on the combustion conditions, CO, CO <sub>2</sub> , CaO, LiO <sub>2</sub> , fluorides, oxygenates, and unidentified organic compounds may be formed during combustion, High temperature may produce metal fume, vapor, and/or dust, Combustion products may cause effects of overexposure as noted in Section 2. Hazards Identification, They may also cause headache; dizziness; coma; convulsion; weakness; drowsiness; tachypnea; nausea; paresthesias; dyspnea; asphyxiation; mild to severe eye, skin or respiratory tract irritation; metal fume fever; metallic taste in mouth; cough; pneumonia; pneumonconiosis; ulceration or perforation of the nasal septum; polymer fume fever; cumulative bone damage; excessive salivation; thirst; sweating; stiff spine; calcification of ligaments of ribs and pelvis; lung damage; and/or central nervous system effects, Other unidentified health effects may occur.
<b>Impact Sensitivity</b>	Not applicable.
<b>Sensitivity to static discharge</b>	Not applicable.
<b>Specific Hazards Arising from the Chemical</b>	Product fume and/or vapor may be irritating or toxic if inhaled. The product, or its dust, can react vigorously with strong oxidizing agents.
<b>Protective Equipment and Precautions for Firefighters</b>	Use full-body protection and full-face, self-contained breathing apparatus operated in a positive-pressure mode. Use water spray (fog) to cool containers and disperse vapors.
<b>NFPA</b>	<b>Health 1</b> <b>Flammability 1</b> <b>Instability 0</b>

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**  
**Environmental Precautions**

Avoid contact with the skin and the eyes.  
Keep petroleum products out of streams and waterways. Assure conformity with applicable government regulations.  
Clean area with an appropriate cleanser.  
Not applicable

**Methods for cleaning up**  
**Other Information**

Clean area with an appropriate cleanser.  
Not applicable

## 7. HANDLING AND STORAGE

**Handling**

The two major means of metal absorption are inhalation and ingestion. After use, always wash hands before smoking, eating, or drinking. Smoking, eating, and drinking should be confined to uncontaminated areas. Work clothes and equipment should remain in designated areas. Before reuse, launder contaminated clothing separate from personal clothing. Avoid skin contact and use personal protection when handling product, waste product, or contaminated equipment. Wash with soap and water after use. Prolonged and repeated contact can cause defatting action of the skin and may cause disorders such as dermatitis, folliculitis, and oil acne. This product is intended for industrial use only. Isolate from children and their environment. This product may separate. Stir well before use. The flash point of this product depends on the degree of separation.

**Storage**

Store in a cool, dry area where accidental contact with acids is not possible. Do not store or handle near high temperature or open flame. Keep storage containers closed when not in use.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico OEL (TWA)
Copper	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	0.1	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup>
Lime	TWA: 2 mg/m <sup>3</sup>	5	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>

NIOSH IDLH: Not applicable.

**Engineering Measures**

No special ventilation requirements under conditions of normal use (air concentrations below PEL/TLV levels).

**Personal Protective Equipment**

**Eye/Face Protection**

Vented goggles or safety glasses with side shields should be worn when using this product.

**Skin Protection**

Clothing appropriate for an industrial environment should be worn.

**Respiratory Protection**

No respiratory equipment is required for normal use.

**General Hygiene Considerations**

When using, do not eat, drink or smoke. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Copper-black	<b>Odor</b>	Petroleum odor
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Solid
<b>pH</b>	No information available	<b>Flash Point</b>	166 °C / 330 °F
<b>Flash Point Method</b>	ASTM D 92, C.O.C.	<b>Autoignition Temperature</b>	No information available
<b>Boiling Point/Range</b>	No information available	<b>Melting Point</b>	No information available
<b>Dropping Point</b>	140 °C / 285 °F	<b>Flammability Limits in Air</b>	No information available
<b>Vapour Density</b>	>1	<b>Vapour Pressure</b>	No information available
<b>Specific Gravity</b>	1.2	<b>Solubility</b>	Negligible
<b>Partition Coefficient (n-octanol/water)</b>	No information available	<b>Viscosity</b>	No information available
<b>Evaporation Rate</b>	<1	<b>Freezing Point</b>	No information available

## 10. STABILITY AND REACTIVITY

**Chemical Stability**  
**Conditions to Avoid**

Not Applicable.

**Incompatible Products**

Not applicable.

**Hazardous Decomposition Products**

Strong oxidizers or acids.

**Possibility of Hazardous Reactions**

Under normal temperatures this product will not decompose.

Not applicable

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating greases	2280 mg/kg ( Rat )		
Lime	500 mg/kg ( Rat )		

#### Irritation

Product may cause irritation to the eyes and/or skin. Ingestion of the product may cause gastrointestinal irritation and upset.

#### Chronic Toxicity

##### Carcinogenicity

Passes IP 346 Method <3% DMSO-extractable components

Component	ACGIH	IARC	NTP	OSHA	Mexico
Copper	TWA: 0.2 mg/m <sup>3</sup>				
Lime	TWA: 2 mg/m <sup>3</sup>				

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lubricating greases		LC50 > 2000 mg/L <i>Salmo gairdneri</i> 96 h		
Copper	EC50 = 120 µg/L 72 h	LC50 0.0068 - 0.0156 mg/L <i>Pimephales promelas</i> 96 h LC50 < 0.3 mg/L <i>Pimephales promelas</i> 96 h LC50 = 0.052 mg/L <i>Oncorhynchus mykiss</i> 96 h LC50 = 0.112 mg/L <i>Poecilia reticulata</i> 96 h LC50 = 0.2 mg/L <i>Pimephales promelas</i> 96 h LC50 = 0.3 mg/L <i>Cyprinus carpio</i> 96 h LC50 = 0.8 mg/L <i>Cyprinus carpio</i> 96 h LC50 = 1.25 mg/L <i>Lepomis macrochirus</i> 96 h		EC50 = 0.03 mg/L 48 h
Lime		LC50 = 1070 mg/L <i>Cyprinus carpio</i> 96 h		

#### Persistence and Degradability

No information available.

#### Bioaccumulation

No information available.

#### Mobility in Environmental Media

No information available

## 13. DISPOSAL CONSIDERATIONS

#### Waste disposal methods

Discard in accordance with local, state, and federal regulations. Empty containers are exempt from RCRA Subtitle C if they contain no more than 2.5 cm of their original contents in the bottom of the container or less than 3% of the original net weight (less than 0.3% by weight for containers over 110 gallons), or if the residue is analyzed and demonstrated to be nonhazardous.

#### Contaminated Packaging

"Empty" containers retain residue and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY AND/OR DEATH. "Empty" containers should be completely drained and properly sealed. Recycle or discard plastic liner, pail or drum in accordance with local, state, and federal regulations. "Empty" drums may be sent to a drum reconditioner.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated by Ground unless it is being shipped by vessel, then it may be classified on documentation as UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant. (Prepared in compliance with IMDG).

**TDG** Not regulated by Ground unless it is being shipped by vessel, then it may be classified on documentation as UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant.

**IATA** UN3077 Environmentally Hazardous Substance, Solid, n.o.s. (Copper Metal Powder), Class 9, PGIII.

**IMDG/IMO** UN3077, Environmentally Hazardous Substance, Solid, n.o.s. (Lead, Copper Metal Powder), Class 9, PGIII, Marine Pollutant.

## 15. REGULATORY INFORMATION

### International Inventories

Component	TSCA	DSL	NDSL	EINECS/EL INCS	ENCS	CHINA	KECL	PICCS	AICS
Lubricating greases				278-011-7		X		X	
Copper	Present	X		EEC No. 231-159-6		X		X	X
Lime	Present	X		215-138-9	X	X		X	X

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values
Copper	

#### SARA 311/312 Hazardous Categorization

Chronic Health Hazard	Yes
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Copper	5000	

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

#### State Right-to-Know

#### Other International Regulations

**Mexico - Grade** No information available

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### WHMIS Hazard Class

Non-controlled

## 16. OTHER INFORMATION

Preparation Date  
Revision Date

June 2011  
23-November-2011

**Revision Number** 1

**Revision Summary**

Format change; Update in Section 9. Physical and Chemical Properties; NFPA Revision

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and WE MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY OR COMPLETENESS OF THE INFORMATION HEREIN. Accordingly, we will not be responsible for damages resulting from use or reliance upon information contained herein regardless of whether it is claimed that the information is inaccurate, incomplete, or otherwise misleading. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**