



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 January 2008

Revision Date 7-November-2011

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Description: Cal Bronze® Lead Free
MSDS #: 0070 302G
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

Appearance Copper-black	Physical State Solid.	Odor 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	45-65
Copper	7440-50-8	7-10

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

4. FIRST AID MEASURES

Eye Contact	Flush with copious amounts of water. Get immediate medical attention.
Skin Contact	Wash thoroughly with soap and water. If irritation occurs, get medical attention.
Inhalation	Remove from exposure. Get medical attention if experiencing cough, irritation or difficult breathing.
Ingestion	Get immediate medical attention. DO NOT INDUCE VOMITING! Possible aspiration hazard.
Notes to Physician	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.
Protection of First-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

5. FIRE-FIGHTING MEASURES

Flammable Properties	No information available
Suitable Extinguishing Media	Dry chemical, water fog, foam, or carbon dioxide may be suitable for extinguishing fires involving this product.
Unsuitable extinguishing media.	No information available
Explosion Limits	
Hazardous Combustion Products	Combustion products may cause effects of overexposure as noted in Section 2. Hazards Identification, Other unidentified health effects may occur, Combustion products are highly dependent on the combustion conditions, CO, CO ₂ , CaO, Li ₂ O, fluorides, oxygenates, and unidentified organic compounds may be formed during combustion, High temperature may produce metal fume, vapor, and/or dust, 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; cough; pneumonia; pneumoconiosis; 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 and/or lung damage.
Impact Sensitivity	Not applicable.
Sensitivity to static discharge	Not applicable.
Specific Hazards Arising from the Chemical	Product fume and/or vapor may be irritating or toxic if inhaled. The product, or its dust, can react vigorously with strong oxidizing agents. High temperatures may produce metal fume, vapor, and/or dust.
Protective Equipment and Precautions for Firefighters	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.
NFPA	Health 1 Flammability 1 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes.
Environmental Precautions	Keep petroleum products out of streams and waterways. Assure conformity with applicable government regulations.
Methods for cleaning up	Clean area with an appropriate cleanser.
Other Information	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 ³ TWA: 1 mg/m ³	0.1	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³

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

Appearance	Copper-black	Odor	Petroleum odor
Odor Threshold	No information available	Physical State	Solid
pH	No information available	Flash Point	196 °C / 385 °F
Flash Point Method	ASTM D 92, C.O.C.	Autoignition Temperature	No information available
Boiling Point/Range	288 °C / 550 °F	Melting Point	No information available
Dropping Point	177 °C / 350 °F	Flammability Limits in Air	No information available
Vapour Density	>1	Vapour Pressure	No information available
Specific Gravity	1.3	Solubility	Negligible
Partition Coefficient (n-octanol/water)	No information available	Viscosity	No information available
Evaporation Rate	<1	Freezing Point	No information available

10. STABILITY AND REACTIVITY

Chemical Stability

Not Applicable.

Conditions to Avoid

Not applicable.

Incompatible Products

Strong oxidizers or acids.

Hazardous Decomposition Products

Under normal temperatures this product will not decompose.

Possibility of Hazardous Reactions

Not applicable

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Lubricating greases	2280 mg/kg (Rat)		
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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 ³				

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

Persistence and Degradability
Bioaccumulation
Mobility in Environmental Media

No information available.
No information available.
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. (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

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	January 2008
Revision Date	7-November-2011
Revision Number	1
Revision Summary	

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

Disclaimer

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End of MSDS