

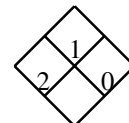


## MATERIAL SAFETY DATA SHEET

VENDEE AND THIRD PERSONS ASSUME THE RISK OF INJURY PROXIMATELY CAUSED BY THIS PRODUCT IF REASONABLE SAFETY PROCEDURES ARE NOT FOLLOWED AS PROVIDED FOR IN THE DATA SHEET, AND VENDOR SHALL NOT BE LIABLE FOR SUCH INJURY. FURTHERMORE, VENDOR SHALL NOT BE LIABLE FOR INJURY TO VENDEE OR THIRD PERSONS PROXIMATELY CAUSED BY ANY ABNORMAL USE OF THIS PRODUCT EVEN IF REASONABLE SAFETY PROCEDURES ARE FOLLOWED.

ALL PERSONS USING THIS PRODUCT, ALL PERSONS WORKING IN AN AREA WHERE THIS PRODUCT IS USED, AND ALL PERSONS HANDLING THIS PRODUCT SHOULD BE FAMILIAR WITH THE CONTENTS OF THIS DATA SHEET. POSTING THIS DOCUMENT FOR EMPLOYEE NOTIFICATION IS RECOMMENDED BY THE VENDOR.

N. F. P. A.



### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>TRADE NAME</b> Cal Bronze®	
<b>SYNONYMS</b> Not Applicable	<b>INTENDED USE</b> Industrial
<b>MANUFACTURER'S NAME</b> Bestolife Corporation	<b>TELEPHONE #</b> (214)631-6070
<b>ADDRESS</b> 2777 Stemmons Freeway Suite 1800, Dallas, Texas 75207	<b>TRANSP. EMERGENCY #</b> (800)424-9300
<b>FOR ADDITIONAL INFORMATION CONTACT</b> Bestolife Corporation	<b>DATE</b> DEC 2007 Revised

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

MATERIAL OR COMPONENT (CAS#)	WEIGHT %	<u>OSHA</u>		<u>ACGIH</u>		Other
		PEL/TWA	Ceiling	TLV/TWA	TLV/STEL	
Petroleum Grease Mixture (CAS# 64742-52-5, 64742-54-7, 7620-77-1 Mixture)	35-55	5mg/m <sup>3</sup> **	None	5mg/m <sup>3</sup> **	10mg/m <sup>3</sup> **	Not Applicable
Copper (CAS# 7440-50-8)	1-5	0.1mg/m <sup>3</sup> ***	None	0.2mg/m <sup>3</sup> ***	None	Not Applicable
Lead (CAS# 7439-92-1)	5-15	50µg/m <sup>3</sup>	None	50µg/m <sup>3</sup>	None	30µg/m <sup>3</sup> Action Level
Lime (CAS# 1305-78-8)	0.1-2	5mg/m <sup>3</sup>	None	2mg/m <sup>3</sup>	None	Not Applicable
Zinc (CAS# 7440-66-6)	3-7	5mg/m <sup>3</sup> ***	None	5mg/m <sup>3</sup> ***	10mg/m <sup>3</sup> ***	Not Applicable
Additives		under 1				
Other Non-Hazardous Ingredients						

\*Respirable Dust                      \*\*Oil Mist, Mineral                      \*\*\*Fume

### 3. HAZARDS IDENTIFICATION

**Routes of Exposure for Users**

- Skin Contact      May cause irritation.
- Skin Absorption      Organic compounds contained herein may be absorbed through the skin.
- Eye Contact      May cause irritation.
- Ingestion      This product may be absorbed by the digestive system. Ingestion can result in both acute and chronic overexposure.
- Inhalation      If the grease base has been removed, i.e. by volatile solvents, heat, etc., the remaining powders and metallics can pose an inhalation hazard resulting in both acute and chronic overexposure as well as lung irritation, lung injury, or other health effects.

<b>Effects of Overexposure</b>	
<b>Acute</b>	Product may cause irritation to the eyes and/or skin. Ingestion of the product may cause gastrointestinal irritation and upset.
<b>Chronic</b>	If left untreated, large oral doses may cause weakness, loss of appetite, insomnia, hypertension, metallic taste in mouth, anemia, constipation, headache, muscle and joint pains, neuromuscular dysfunction, possible paralysis and encephalopathy. Prolonged and repeated contact with the product may cause a defatting of the skin, dermatitis, folliculitis and/or oil acne.
<b>Signs and Symptoms of Exposure</b>	Skin or eye irritation; see effects of overexposure described above.
<b>Aggravated Medical Conditions</b>	Chronic forms of kidney, hematopoietic or neurologic diseases; preexisting respiratory and cardiovascular disorders may be aggravated by ingestion or inhalation of large doses. Preexisting eye or skin disorders may be aggravated by prolonged contact with this product.
<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. Lead and its inorganic compounds are neurotoxins which may produce peripheral neuropathy. Ingestion or inhalation of lead can pose risk to developing fetuses and may also impair the reproductive systems in both men and women. Lead can damage the kidneys, hematopoietic and central nervous system. For an overview of the effects of lead exposure, consult Appendix A of OSHA's Occupational Exposure to Lead (29 C.F.R. §1910.1025). For combustion product effects see Hazardous Combustion Products in Section 5. Fire Fighting Measures.
<b>4. FIRST AID MEASURES</b>	
Eyes	Flush with copious amounts of water. Get immediate medical attention.
Skin	Wash thoroughly with soap and water after use. If irritation occurs, get medical attention.
Ingestion	Get immediate medical attention. DO NOT INDUCE VOMITING! Possible aspiration hazard.
Inhalation	Remove from exposure. Get medical attention if experiencing cough, irritation or difficult breathing.
<b>5. FIRE FIGHTING MEASURES</b>	
<b>Flash Point</b>	Minimum 385°F (196°C)      Test Method:    ASTM D 92, C.O.C.
<b>Flammable Limits in Air (% by volume, estimated)</b>	Lower: Not Available      Upper: Not Available
<b>Auto-ignition Temperature</b>	Not Available
<b>Hazardous Combustion Products</b>	Combustion products are highly dependent on the combustion conditions. CO, CO <sub>2</sub> , CaO, oxygenates, and unidentified organic compounds may be formed during combustion. High temperatures may produce metal fume, vapor, and/or dust. Combustion products may cause effects of overexposure as noted in Section 3. Hazards Identification. They may also cause vomiting; uncoordinated body movements; stupor; dizziness; coma; convulsion; 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; and/or lung damage. Other unidentified health effects may occur.
<b>Conditions Contributing to Flammability</b>	High temperatures; open flame; combining with strong oxidizer or acid
<b>Extinguishing Media</b>	Dry chemical, water fog, foam, or carbon dioxide may be suitable for extinguishing fires involving this product. Do not spray water directly on burning material. Observe caution when using water or foam as frothing may occur.
<b>Special Fire Fighting Procedures</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>Unusual Fire and Explosion Hazards</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>Sensitivity to Impact</b>	Not Applicable
<b>Sensitivity to Static Discharge</b>	Not Applicable

## 6. ACCIDENTAL RELEASE MEASURES

**Steps to be Taken if Material is Released or Spilled** Clean area with an appropriate cleanser. Keep petroleum products out of streams and waterways. Assure conformity with applicable governmental regulations.

**Neutralizing Chemicals** Not Applicable

## 7. HANDLING AND STORAGE

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. **KEEP OUT OF REACH OF CHILDREN.**

This product may separate. Stir well before use. The flash point of this product depends on the degree of separation. Store in a cool, dry area where accidental contact with acids is not possible. Keep storage containers closed when not in use. Do not store or handle near high temperature or open flame.

## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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

### Specific Personal Protection Equipment

**RESPIRATORY** None required for normal use. Dry residue may be created by high downhole temperatures; if the residue is removed without a solvent or other means of controlling dust, workers should wear air-purifying respirators with HEPA cartridges.

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

**GLOVE** Oil-resistant gloves should be worn when handling this product.

**OTHER CLOTHING AND EQUIPMENT** As appropriate for the industrial environment.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>BOILING POINT @ 760 mm Hg</b>	550°F (288°C) Approx. IBP	<b>MELTING POINT</b>	320-350°F (160-177°C) dropping point of grease
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<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1)</b>	1.4	<b>VAPOR PRESSURE (Reference Temperature)</b>	Not Available
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<b>VAPOR DENSITY (Air = 1)</b>	Greater than 1	<b>SOLUBILITY IN H<sub>2</sub>O (% by wt.)</b>	Negligible
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<b>% VOLATILE BY VOLUME</b>	Not Available	<b>EVAPORATION RATE (Butyl Acetate = 1)</b>	Less than 1
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<b>COEFF. WATER/OIL DISTRIBUTION</b>	Not Available	<b>pH</b>	Not Available
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<b>FREEZING POINT</b>	Not Available	<b>ODOR THRESHOLD</b>	Not Available
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**APPEARANCE AND ODOR** Black-copper semisolid, oil/grease odor, noncombustible, nonvolatile under normal use

## 10. STABILITY AND REACTIVITY

**Conditions Contributing to Instability** Not Applicable      **Reactivity** Not Applicable

**Incompatibility** Strong oxidizers or acids combined with this product may liberate hydrogen gas.

**Hazardous Decomposition Products** Under normal temperatures this product will not decompose.

**Conditions Contributing to Hazardous Polymerization** Not Applicable

## 11. TOXICOLOGICAL INFORMATION

### Toxicity, Mutagenic, Teratogenic, Synergistic and Sensitization Information

LD<sub>50</sub> and LC<sub>50</sub> information on the oil and grease is not available. LD<sub>50</sub> and LC<sub>50</sub> information on other components is not available. Rare cases of allergic contact dermatitis have been reported in people working with copper dust.

### Carcinogenicity

Listed by:  IARC 2A \*  NTP\*  OSHA  California Component: **LEAD**

## 12. ECOLOGICAL INFORMATION

Not Available

## 13. DISPOSAL CONSIDERATIONS

### Waste Disposal Method

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.

### “Empty” Container Warning

“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

**U.S. DOT:** Not regulated by Ground unless it is being shipped by vessel, then it may be classified on documentation as UN3082 Environmentally Hazardous Substance, Liquid n.o.s. (Copper Metal Powder), Class 9, PGIII, Marine Pollutant. (Prepared in compliance with IMDG)

**ICAO/IATA:** Not Regulated

**IMDG:** UN3082 Environmentally Hazardous Substance, Liquid, n.o.s. (Copper Metal Power), Class 9, PGIII, RQ Marine Pollutant.

**Canadian Transportation of Dangerous Goods** This product is not considered Hazardous Material for shipping under Canadian Transportation of Dangerous Goods.

## 15. REGULATORY INFORMATION

### Toxic Chemical Release Reporting, EPA Regulation 40 C.F.R. §372 (SARA Section 313)

Reportable chemicals in product: 5-15% lead (CAS # 7439-92-1), 1-5% copper (CAS# 7440-50-8); 3-7% zinc (CAS #7440-66-6) (in fume or dust form only)

### California Safe Drinking Water and Toxic Enforcement Act of 1986 (“Proposition 65”)

WARNING: This product contains lead, a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Overexposure from this product may be prevented by following the recommendations throughout this MSDS.

### Toxic Substances Control Act (TSCA), EPA Regulation 40 C.F.R. §710

The product is a mixture as defined by TSCA. The chemical ingredients in this product are in the Section 8 (b) Chemical Substance Inventory (40 C.F.R. §710) and/or are otherwise in compliance with TSCA. In the case of ingredients obtained from other manufacturers, this company relies on the assurance of responsible third parties in providing this statement.

### Canadian Workplace Hazardous Materials Information System

This product is considered controlled in Canada and has been placed in WHMIS Subdivision B of Division 2 of Class D due to lead content. This MSDS has been prepared to meet WHMIS and OSHA requirements using the ANSI 16 heading MSDS format.

## 16. OTHER INFORMATION

\*Inorganic Lead has been listed as “reasonably anticipated to be a human carcinogen” by NTP; and “probably carcinogenic to humans” by the IARC.