



Revision Number: 002.0

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** BONDERITE L-FM 1801 FORMING LUBRICANT ACHESON known as CUPROBOND 1801  
**Product type:** Lubricant coating  
**Restriction of Use:** None identified  
**Company address:** Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067

**IDH number:** 1211672

**Region:** United States

**Contact information:**  
 Telephone: +1 (860) 571-5100  
 MEDICAL EMERGENCY Phone: Poison Control Center  
 1-877-671-4608 (toll free) or 1-303-592-1711  
 TRANSPORT EMERGENCY Phone: CHEMTREC  
 1-800-424-9300 (toll free) or 1-703-527-3887  
 Internet: www.henkelna.com

**2. HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER:** HARMFUL IF SWALLOWED.  
 CAUSES SKIN IRRITATION.  
 MAY CAUSE AN ALLERGIC SKIN REACTION.  
 CAUSES SERIOUS EYE DAMAGE.  
 MAY CAUSE DROWSINESS OR DIZZINESS.  
 SUSPECTED OF CAUSING GENETIC DEFECTS.

HAZARD CLASS	HAZARD CATEGORY
ACUTE TOXICITY ORAL	4
SKIN IRRITATION	2
SERIOUS EYE DAMAGE	1
SKIN SENSITIZATION	1
GERM CELL MUTAGENICITY	2
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust or fumes. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear eye and face protection. Wear protective gloves. Use personal protective equipment as required.

**Response:** If SWALLOWED: Immediately call poison control or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. IF exposed or concerned: Get medical attention. Immediately call a poison control center or physician. Rinse mouth. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing.

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**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.  
**Disposal:** Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Copper sulfate	7758-98-7	30 - 60

\* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

**Inhalation:** If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

**Skin contact:** Remove contaminated clothing and footwear. For skin contact, flush with large amounts of water. Seek immediate medical attention.

**Eye contact:** In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:** DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

**Symptoms:** See Section 11.

**Notes to physician:** A metal chelator is available for copper poisoning, D-penicillamine. Chelation therapy is generally recommended in symptomatic patients. If the patient is asymptomatic, confirmation from the laboratory may be received before instituting chelation therapy.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:** Use media appropriate for surrounding material.

**Special firefighting procedures:** Wear full protective clothing. Wear self-contained breathing apparatus.

**Unusual fire or explosion hazards:** This product is an aqueous mixture which will not burn.

**Hazardous combustion products:** Decomposition of this product may yield metallic oxides.

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Wear appropriate personal protective equipment. Do not allow product to enter sewer or waterways.

**Clean-up methods:** Sweep up or gather material and place in appropriate container for disposal. Dispose of according to Federal, State and local governmental regulations.

## 7. HANDLING AND STORAGE

- Handling:** Avoid contact with eyes, skin and clothing. For industrial use only. Avoid breathing dust. Wash thoroughly after handling. Provide adequate ventilation.
- Storage:** For safe storage, store at or below 120 °F (48.9 °C)  
Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Copper sulfate	None	None	None	None

- Engineering controls:** Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.
- Respiratory protection:** If ventilation is not sufficient to effectively prevent buildup of dust, appropriate NIOSH/MSHA respiratory protection must be provided.
- Eye/face protection:** Wear chemical goggles.
- Skin protection:** Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- |   |                       |
|---|-----------------------|
| <b>Physical state:</b>                          | Solid                 |
| <b>Color:</b>                                   | Turquoise             |
| <b>Odor:</b>                                    | Odorless              |
| <b>Odor threshold:</b>                          | Not available.        |
| <b>pH:</b>                                      | 4.7 (1% solution)     |
| <b>Vapor pressure:</b>                          | Not applicable        |
| <b>Boiling point/range:</b>                     | Not determined        |
| <b>Melting point/ range:</b>                    | Not determined        |
| <b>Specific gravity:</b>                        | 1.295 at 20 °C (68°F) |
| <b>Vapor density:</b>                           | Not applicable        |
| <b>Flash point:</b>                             | Not applicable        |
| <b>Flammable/Explosive limits - lower:</b>      | Not available.        |
| <b>Flammable/Explosive limits - upper:</b>      | Not available.        |
| <b>Autoignition temperature:</b>                | Not applicable        |
| <b>Evaporation rate:</b>                        | Not determined        |
| <b>Solubility in water:</b>                     | Moderate              |
| <b>Partition coefficient (n-octanol/water):</b> | Not determined        |
| <b>VOC content:</b>                             | Not applicable        |
| <b>Viscosity:</b>                               | Not available.        |
| <b>Decomposition temperature:</b>               | Not available.        |

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable at normal conditions.
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Oxides of sulfur. Copper oxides.
<b>Incompatible materials:</b>	Copper Sulfate reacts violently with hydroxylamine.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Keep away from heat, spark and flame.

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Inhalation, Eyes

**Potential Health Effects/Symptoms**

<b>Inhalation:</b>	Dusts of this product may cause irritation of the nose, throat, and respiratory tract. Inhalation of dusts of this product may result in shortness of breath, limitation of chest expansion, dry cough, and a lessened capacity for work.
<b>Skin contact:</b>	Dust or powder may irritate the skin. This product may discolor the skin. This product may cause an allergic skin reaction. Combining this product with water may release heat which can cause burns.
<b>Eye contact:</b>	Dust or powder may irritate eye tissue. Prolonged contact may cause severe irritation or corneal burns.
<b>Ingestion:</b>	This product may be fatal if it is swallowed. Ingestion of this product may result in damage to the liver and heart and visual dysfunction with acute exposure. This product may cause methemoglobinemia characterized by a reduction in oxygen carrying capacity of the blood with symptoms including headache, dizziness, flushed face, fatigue, nausea, vomiting, drowsiness, stupor, tremors, uneven heart action, coma and rarely death.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Copper sulfate	Oral LD50 (RAT) = 300 mg/kg Oral LD50 (RABBIT) = 125 mg/kg	Allergen, Blood, Central nervous system, Corrosive, Gastrointestinal, Immune system, Irritant, Kidney, Liver, Mutagen

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Copper sulfate	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Harmful to aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

<b>Recommended method of disposal:</b>	Follow all local, state, federal and provincial regulations for disposal.
<b>Hazardous waste number:</b>	Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA.

## 14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

### U.S. Department of Transportation Ground (49 CFR)

<b>Proper shipping name:</b>	RQ, Environmentally hazardous substances, solid, n.o.s. (Copper sulphate)
<b>Hazard class or division:</b>	9
<b>Identification number:</b>	UN 3077
<b>Packing group:</b>	III
<b>Marine pollutant:</b>	Copper sulphate
<b>DOT Hazardous Substance(s):</b>	Cupric sulfate

### International Air Transportation (ICAO/IATA)

<b>Proper shipping name:</b>	Environmentally hazardous substance, solid, n.o.s. (Copper sulphate)
<b>Hazard class or division:</b>	9
<b>Identification number:</b>	UN 3077
<b>Packing group:</b>	III

### Water Transportation (IMO/IMDG)

<b>Proper shipping name:</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper sulphate)
<b>Hazard class or division:</b>	9
<b>Identification number:</b>	UN 3077
<b>Packing group:</b>	III
<b>Marine pollutant:</b>	Copper sulphate
<b>Additional information:</b>	IMDG-Code: Segregation group 1- Acids

## 15. REGULATORY INFORMATION

### United States Regulatory Information

<b>TSCA 8 (b) Inventory Status:</b>	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
<b>TSCA 12 (b) Export Notification:</b>	None above reporting de minimis
<b>CERCLA/SARA Section 302 EHS:</b>	None above reporting de minimis
<b>CERCLA/SARA Section 311/312:</b>	Immediate Health, Delayed Health
<b>CERCLA/SARA Section 313:</b>	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Copper sulfate (CAS# 7758-98-7).
<b>CERCLA Reportable quantity:</b>	Copper sulfate (CAS# 7758-98-7) 10 lbs. (4.54 kg)
<b>California Proposition 65:</b>	This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### Canada Regulatory Information

<b>CEPA DSL/NDSL Status:</b>	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.
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## 16. OTHER INFORMATION

**This safety data sheet contains changes from the previous version in sections:** New Safety Data Sheet format.

**Prepared by:** John DiCerbo, Sr. Regulatory Affairs Specialist

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