



GARDENA, CA  
NEW BRUNSWICK, NJ

# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1"> <tr> <td>Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							
See Section 15.								

<b>Section 1. Chemical Product and Company Identification</b>		Page Number: 1
Common Name/ Trade Name	<b>Cuprous oxide</b>	
Manufacturer	ProChem, Inc. 826 Roosevelt Rd Rockford, IL 61109	CAS# 1317-39-1 RTECS GL8050000 TSCA TSCA 8(b) inventory: Cuprous oxide
Commercial Name(s)	Not available.	
Synonym	Not available.	
Chemical Name		<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b>  <b>815-398-1788</b>
Chemical Family	Not available.	
Chemical Formula	Cu <sub>2</sub> O	
Supplier		

<b>Section 2. Composition and Information on Ingredients</b>					
			<i>Exposure Limits</i>		
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Cuprous oxide	1317-39-1				100
Toxicological Data on Ingredients	Cuprous oxide: ORAL (LD50): Acute: 470 mg/kg [Rat].				

<b>Section 3. Hazards Identification</b>	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of eye contact (irritant).
Potential Chronic Health Effects	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of eye contact (irritant). <b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to kidneys, lungs, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	No known effect on eye contact, rinse with water for a few minutes.
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

Precautions	Do not ingest. Do not breathe dust. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label.
Storage	No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

**Section 8. Exposure Controls/Personal Protection**

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

**Section 9. Physical and Chemical Properties**

Physical state and appearance	Solid. (Powdered solid.)	Odor	Not available.
Molecular Weight	143.08 g/mole	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	Red.
Boiling Point	1800°C (3272°F)		
Melting Point	1232°C (2249.6°F)		
Critical Temperature	Not available.		
Specific Gravity	6 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water.		

**Section 10. Stability and Reactivity Data**

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Not available.
Corrosivity	Non-corrosive in presence of glass.

**Cuprous oxide**

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Special Remarks on  
Reactivity Not available.

Special Remarks on  
Corrosivity Not available.

Polymerization No.

**Section 11. Toxicological Information**

Routes of Entry Inhalation. Ingestion.

Toxicity to Animals Acute oral toxicity (LD50): 470 mg/kg [Rat].

Chronic Effects on Humans The substance is toxic to kidneys, lungs, liver.

Other Toxic Effects on  
Humans Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on  
Toxicity to Animals Not available.

Special Remarks on  
Chronic Effects on Humans Not available.

Special Remarks on other  
Toxic Effects on Humans Not available.

**Section 12. Ecological Information**

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products  
of Biodegradation The products of degradation are as toxic as the original product.

Special Remarks on the  
Products of Biodegradation Not available.

**Section 13. Disposal Considerations**

Waste Disposal

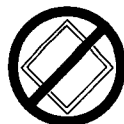
**Section 14. Transport Information**

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for  
Transport Not applicable.

DOT (Pictograms)



**Section 15. Other Regulatory Information and Pictograms**

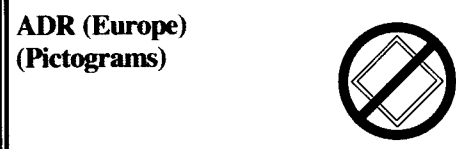
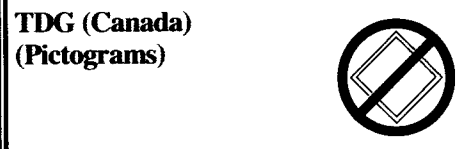
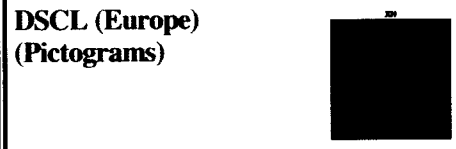
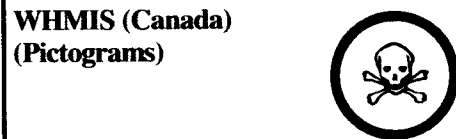
**Federal and State Regulations**  
 Pennsylvania RTK: Cuprous oxide  
 Massachusetts RTK: Cuprous oxide  
 TSCA 8(b) inventory: Cuprous oxide  
 SARA 313 toxic chemical notification and release reporting: Cuprous oxide  
 CERCLA: Hazardous substances.: Cuprous oxide

**California Proposition 65 Warnings**

**Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

<b>Other Classifications</b>	<b>WHMIS (Canada)</b> CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).
	<b>DSCL (EEC)</b> R22- Harmful if swallowed. R38- Irritating to skin.

<b>HMIS (U.S.A.)</b>	Health Hazard	2	<b>National Fire Protection Association (U.S.A.)</b>	Health		Flammability
	Fire Hazard	0				Reactivity
	Reactivity	0				Specific hazard
	Personal Protection	E				



**Protective Equipment**

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Safety glasses.

**Section 16. Other Information**

References Not available.

Other Special Considerations Not available.

**PREPARED JUNE 2006**

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, ProChem Chemicals assumes no responsibility for the completeness or accuracy of the information contained herein.*