

2004 visual arts dept

NPCA - HMIS HAZARD RATING	
Health	1
Flammability	1
Reactivity	1
Maximum Personal Protection	E

**MATERIAL SAFETY DATA SHEET**  
**PURPLE COPP 97N, RED COPP 97N**

**SECTION I MANUFACTURER** AMERICAN CHEMET CORPORATION  
P.O. Box 1160  
East Helena, MT 59635

**EMERGENCY TELEPHONE** (406) 227-5302 ATTN: Dan Brimhall

CHEMICAL NAME	FORMULA	CAS NUMBER	APPROX. WT. %
CUPROUS OXIDE	Cu <sub>2</sub> O	1317-39-1	97
CUPRIC OXIDE	CuO	1317-38-0	
METALLIC COPPER	Cu	7440-50-8	

**SECTION II HAZARDOUS INGREDIENTS**

	%	TLV & PEL
COPPER	86% (Min)	1 mg/m <sup>3</sup>

There is no ACGIH TLV or OSHA PEL for either cuprous oxide or cupric oxide. Exposure is governed by the 8 hour TWA established for finely divided copper in dusts or mists. Cuprous oxide, cupric oxide and copper are not carcinogenic materials as listed by OSHA (29CFR1910) or ACGIH (Appendix A, Threshold Limit Values for Chemical Substances 1989-1990).

**SECTION III PHYSICAL DATA**

Boiling Point (f):	Specific Gravity:	Vapor Pressure:	Percent Volatile by volume:
NA	H <sub>2</sub> O=1 6.0	NA	0%
Vapor Density:	Evaporation Rate:	Solubility in Water:	Melting Point:
NA	NA	Negligible	2255 °F
			Appearance and Odor:
			Red Fine Powder. No Odor.

**SECTION IV FIRE & EXPLOSION HAZARD DATA**

Flash Point: NA

Flammable Limits: LEL NA, UEL NA

Extinguishing Media: CO<sub>2</sub>, ABC extinguisher, or water.

Normal Fire Fighting Procedures: Separate from mass. Eliminate oxygen.

Unusual Fire Fighting Procedures: Spontaneous combustion may occur oxidizing product to CuO if exposed to moist air at temperatures above 100°C.

**SECTION V HEALTH HAZARD DATA**

Threshold Limit Value: See Section II

Signs, Symptoms, and Effects of Overexposure: Nausea, chills, diarrhea. May cause respiratory irritation; skin irritation (oxide pox); fever, eye irritation with redness, pain and conjunctivitis; preexisting lung diseases may be aggravated by exposure. Could result in respiratory disease if over exposed on a chronic basis.

Primary Routes of Entry: Inhalation and/or ingestion.

Emergency and First Aid Procedure: Remove to fresh air. Lay patient down. Cover with blanket. If irritated, flush eyes and skin with large volumes of fresh water for 15 minutes. Refer to physician.

**SECTION VI REACTIVITY DATA**

Stable  X  Unstable \_\_\_\_\_

Conditions and Materials to Avoid: Temperatures above 100°C while in presence of moist air. Mass build up under reactive conditions. Under certain conditions cuprous oxide may react violently with strong reactants such as acids, bases, and metals, such as but not limited to, Al and Mg.

Hazardous Decomposition Products: Copper fumes will be released if cuprous oxide is heated above its melting point (2255°).

Hazardous Polymerization: Will not occur.

**SECTION VII SPILL OR LEAK PROCEDURES**

Steps to be taken in case material is released or spilled. Clean up with vacuum or conventional tools. Avoid dusting.

Waste Disposal: Approved land fill if allowed by local, state and federal authorities.

**SECTION VIII SPECIAL PROTECTION INFORMATION**

Respiratory Protection: Cartridge type filter or dust mask approved by MSHA or NOISH. Refer to Respiratory Protective Devices approved by Bureau of Mines Circular IC 8436.

Ventilation: To keep below listed TLV in Section II, use general dilution type ventilation.

Protective Gloves: Wear if skin contact is probable and skin is sensitive.

Eye Protection: Safety glasses or goggles.

Other Protective Equipment: Long sleeve shirts if contact is probable and skin is sensitive.

**SECTION IX SPECIAL PRECAUTIONS**

Precautions to be taken in handling and storing: Keep lids tightly sealed. Store in cool, dry place.

Other Precautions: Do not take internally. Avoid prolonged contact with skin. Wash with soap and water after contact.

**SECTION X SARA TITLE III**

This product contains copper compounds and is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

AMERICAN  
**chemet**  
CORPORATION

RED COPP 97N

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Telex 72-4301 Chemet DFLD  
FAX (708) 948-0811

<u>SPECIFICATIONS</u>	<u>MIN/MAX</u>	<u>TYPICAL</u>
CUPROUS OXIDE - $Cu_2O$	95 % MIN	96 %
CUPROUS OXIDE + FREE COPPER	97 % MIN	98 %
CUPRIC OXIDE - $CuO$	3 % MAX	1.5 %
METALLIC COPPER	2 % MAX	1 %
TOTAL COPPER	86 % MIN	88 %
METALS OTHER THAN COPPER	.5 % MAX	.1 %
ACETONE SOLUBLE	.5 % MAX	.3 %
CHLORIDES	.4 % MAX	.2 %
SULFATES,	.1 % MAX	NIL
MOISTURE CONTENT	.1 % MAX	NIL

PHYSICAL PROPERTIES

-325 MESH	99.9	99.99
GRIND (HEGMAN) CHEMET TEST	4½-5	5
OIL DEMAND PER 100 LBS. PIGMENT		11
SPECIFIC GRAVITY (GM/CC)		5.8496
POUNDS PER U.S. GALLON		48.73
BULKING - U.S. GALLONS PER POUND		.02052
BULKING - CUBIC CENTIMETERS PER GRAM		.17095

E.P.A. REGISTRATION NUMBER 26883-5

Available packaged in 50 lb. or 25 kg. bags, 60 bags per pallet. On request in steel containers of 5 gal., 100 lb.; 15 gal., 250 lb., or 30 gal., 500 lb. capacity or bulk bags 2,500 - 3,000 lbs..

This material meets the requirements of U.S. M Specification MIL-P-15169B. CAS-1317-39-1

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PURPOSES WE RECOMMEND  
AS COMMERCIAL AVAILABLE

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