

MATERIAL SAFETY DATA SHEET

13600 SERIES CUPRIC OXIDE

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

SECTION I

MANUFACTURER

AMERICAN CHEMET CORPORATION
P.O. BOX 1160
East Helena, MT 59635 USA

24-Hour Emergency: CHEMTREC
North America: 1-800-424-9300
International: 1-703-527-3887
(Collect calls accepted)

CHEMICAL NAME	CAS NUMBER	APPROX. WT. %
CUPRIC OXIDE (CuO)	1317-38-0	98%
CUPROUS OXIDE (Cu ₂ O)	1317-39-1	1.5%

SECTION II

HAZARDOUS INGREDIENTS

TLV & PEL

COPPER 78% Min 1 mg/m³

There is no ACGIH TLV or OSHA PEL for 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 (29 CFR 1910) or ACGIH (Appendix A, Threshold Limit Values for Chemical Substances 1995-1996).

SECTION III PHYSICAL DATA

Boiling Point: NA
Specific Gravity: H₂O=1 6.0
Vapor Pressure: NA
Percent Volatile by volume: 0%
Vapor Density: NA
Evaporation Rate: NA
Solubility in Water: Negligible
Melting Point: Cupric Oxide decomposes at 1847° to cuprous oxide and oxygen. Cuprous oxide melts at 2255° F.
Appearance and Odor: Black Fine Powder. No Odor.

SECTION IV FIRE & EXPLOSION HAZARD DATA

Flash Point: NA
Flammable Limits LEL: NA UEL: NA
Extinguishing Media: Will not burn.
Special Fire Fighting Procedures: None
Unusual Fire Fighting Procedures: See Section VI
Personal Protective Equipment: Wear Self Contained Breathing Apparatus.

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: Cupric oxide may react violently with strong reductants; e.g., organic compounds, such as but not limited to hydrazine and acetylene, carbide compounds, acids, bases and metals such as, but limited to, Al, Mg, B,K,Ni,Ti & Zr.

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

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 particulate filter respirator or dust mask approved by NIOSH. Refer to Respiratory Protective Devices approved by NIOSH under 42 CFR 84.
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.
Keep out of reach of children. Read and follow all label instructions. This information is based on our present knowledge. This is not a guarantee of specific product features. It is the user's responsibility to satisfy themselves as to the suitability and completeness of this information for their own particular use.

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.