



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

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MSDS No. CC 525  
Effective Date October 30, 1998

## SECTION V HEALTH HAZARD DATA

CC 525

**Threshold Limited Value** None assigned to this material by (ACGIH 1992-93). (Air) As copper metal: 1.0 mg/m<sup>3</sup> for 8 hr. working day. Copper (fume) TLV 0.2 mg/m<sup>3</sup>.

**Effects of Overexposure** **INHALATION:** Dust may cause upper respiratory tract irritation, sneezing, coughing, digestive disorder, and fever. Prolonged exposure may result in congestion of nasal mucous membranes, ulceration of nasal septum, and anemia. **EYES:** Causes irritation, conjunctivitis, ulceration of eyelids, and clouding of cornea. **SKIN:** Causes irritation. May cause allergic skin reaction.

**Emergency and First Aid Procedures** **INHALATION:** Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. **EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Flush thoroughly with water, then wash with mild soap and water. **INGESTION:** If swallowed, if conscious, give one or two glasses of water to drink. Induce vomiting and call physician. Never give anything by mouth to an unconscious person.

## SECTION VI REACTIVITY DATA

|                  |                 |   |                            |  |
|------------------|-----------------|---|----------------------------|--|
| <b>Stability</b> | <b>Unstable</b> |   | <b>Conditions to Avoid</b> | Excessive temperature and heat.<br>Concentrated Nitric acid. |
|                  | <b>Stable</b>   | X |                            |  |

**Incompatibility (Materials to Avoid)** Cupric oxide may react violently with strong reductants, e.g., but not limited to Aluminum; Boron; Cesium Acetylene Carbide; Hydrazine; Magnesium; Phospham; Potassium; Sodium; Titanium; Zirconium; Rubidium Acetylene Carbide.

**Hazardous Decomposition Products** Copper fumes or dust will be released if heated above its melting point 2255°F.

|                                 |                            |                       |                 |
|---------------------------------|----------------------------|-----------------------|-----------------|
| <b>Hazardous Polymerization</b> | <b>Conditions to Avoid</b> |                       | Not applicable. |
|                                 | <b>May Occur</b>           | <b>Will Not Occur</b> |                 |
|                                 |                            | X                     |                 |

## SECTION VII SPILL OR LEAK PROCEDURES

**Steps to be taken in case material is released or spilled** Recover for use if not contaminated. Clean up with vacuum or conventional tools. Avoid dusting. Place in a suitable container for disposal.

**Waste Disposal Method** Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.  
Dispose of in an approved chemical landfill or contract with a licensed chemical waste disposal agency.

## SECTION VIII SPECIAL PROTECTION INFORMATION

**Respiration Protection (Specify Type)** None needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood or wear a NIOSH/MSHA-approved dust mask or respirator.

|                    |                             |              |                |     |
|--------------------|-----------------------------|--------------|----------------|-----|
| <b>Ventilation</b> | <b>Local Exhaust</b>        | Recommended. | <b>Special</b> | No. |
|                    | <b>Mechanical (General)</b> | Recommended. | <b>Other</b>   | No. |

|                          |         |                       |                          |
|--------------------------|---------|-----------------------|--------------------------|
| <b>Protective Gloves</b> | Rubber. | <b>Eye Protection</b> | Chemical safety glasses. |
|--------------------------|---------|-----------------------|--------------------------|

**Other Protective Equipment** Safety glasses, smock, apron, proper gloves, ventilation hood, eye wash station.

## SECTION IX SPECIAL PRECAUTIONS

**Precautions to be Taken in Handling & Storing** Keep container tightly closed. Store in a cool, dry place. Wash thoroughly after handling.  
Keep container tightly closed when not in use.

**Other Precautions** Read label on container before using. Do not wear contact lenses when working with chemicals.

Avoid contact with eyes and prolonged contact with skin. Use with adequate ventilation. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

|                       |                      |                                 |                                       |
|-----------------------|----------------------|---------------------------------|---------------------------------------|
| <b>Revision</b> No. 4 | <b>Date</b> 10/30/98 | <b>Approved</b> Michael Raszeja | <b>Chemical Safety Coordinator</b> MR |
|-----------------------|----------------------|---------------------------------|---------------------------------------|

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards. Printed on recycled paper.

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

|                          |                     |  |
|--------------------------|---------------------|--|
| <b>Product</b>           | CUPRIC OXIDE, BLACK | <br><b>CHEMTREC</b><br><b>800-424-9300</b><br>Day 716-226-6177<br><br><b>NFPA HAZARD RATING</b><br>LEAST SLIGHT MODERATE HIGH EXTREME<br>0 1 2 3 4<br><br><b>HMIS *</b><br>0 1 2 3 4 |
| <b>Chemical Synonyms</b> | Copper (II) Oxide   |  |
| <b>Formula</b>           | CuO                 |  |
| <b>Unit Size</b>         | up to 2.5 Kg.       |  |
| <b>C.A.S. No.</b>        | 1317-38-0           |  |

## SECTION II INGREDIENTS OF MIXTURES

| Principal Component(s)                              | %   | TLV Units         |
|---|-----|-------------------|
| Cupric Oxide  | 98% | See Section V.    |
| Inert ingredients                                   | 2%  | None established. |
| <b>CAUTION! DO NOT BREATHE DUST. MAY BE HARMFUL</b> |     |                   |
| <b>IF SWALLOWED. MAY CAUSE IRRITATION TO SKIN,</b>  |     |                   |
| <b>EYES AND MUCOUS MEMBRANES.</b>                   |     |                   |

## SECTION III PHYSICAL DATA

|                               |                                       |  |                 |
|-------------------------------|---------------------------------------|--|-----------------|
| <b>Melting Point (°F)</b>     | Decomposes 1008°C (1847°F) *          | <b>Specific Gravity (H<sub>2</sub>O = 1)</b> | 6.0             |
| <b>Boiling Point (°F)</b>     | Not applicable.                       | <b>Percent Volatile by Volume (%)</b>        | N/A             |
| <b>Vapor Pressure (mm Hg)</b> | Not applicable.                       | <b>Evaporation Rate ( =1)</b>                | Not applicable. |
| <b>Vapor Density (Air=1)</b>  | Not applicable.                       |  |                 |
| <b>Solubility in Water</b>    | Negligible.                           |  |                 |
| <b>Appearance &amp; Odor</b>  | Black finely divided powder; no odor. |  |                 |

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

|                                  |                       |  |    |              |              |
|----------------------------------|-----------------------|--|----|--------------|--------------|
| <b>Flash Point (Method Used)</b> | Non-combustible (NA). | <b>Flammable Limits in Air % by Volume</b> | NA | <b>Lower</b> | <b>Upper</b> |
|                                  |                       |  |    | -----        | -----        |

**Extinguisher Media** Use any media suitable for extinguishing supporting fire.

### SPECIAL FIREFIGHTING PROCEDURES

Cupric Oxide will not burn, nor will it support combustion. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus.

\* Decomposes at 1847°F to Cuprous Oxide and oxygen.  
Cuprous Oxide melts at 2255°F.

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products or dust; can react vigorously with oxidizing materials.

D.O.T. **NON-REGULATED.**

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20