

## MATERIAL SAFETY DATA SHEET

### SECTION 1. Identification of the Substance and Manufacturer

Product: **AG COPP 75**

Manufacturer: American Chemet Corporation  
One Smelter Road / P.O. Box 1160  
East Helena, MT 59635 U.S.A.  
+1(406) 227-5302 (Phone)  
+1 (406) 227-8047 (Fax)

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

### SECTION 2. Composition/Information of Ingredients

| Ingredient              | %      | EC Number | CAS No.   | Classification | R Phrases   | Occupational Exposure Standards                          |
|-------------------------|--------|-----------|-----------|----------------|-------------|--|
| Cuprous Oxide           | 70-90% | 215-270-7 | 1317-39-1 | Harmful        | R22; R50/53 | Copper as dusts & mist                                   |
| Proprietary Ingredients | 10-30% |           |           |                |             | 1 mg/m <sup>3</sup> 8-hour<br>2 mg/m <sup>3</sup> 15 min |

8 hour – Long-term exposure limit (8-hour time weighted average reference period)  
15 min – Short-term exposure limit (15 minute reference period)

### SECTION 3. Hazard Identification

#### Primary Routes of Entry:

Inhaled  Skin/Eye  Swallowed  Injected

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.
- Pre-existing lung disease may be aggravated by exposure. Could result in respiratory disease if overexposed on a chronic basis.

### SECTION 4. First Aid Measures

INHALATION: Remove to fresh air. Lay patient down. Cover with blanket.  
INGESTION: Give 200-300 mL water to drink. DO NOT induce vomiting.  
SKIN CONTACT: For skin exposure, remove contaminated clothing and wash with soap and water.  
EYE CONTACT: If irritated, flush eyes and skin with large volumes of fresh water for 15 minutes.  
MEDICAL NOTES: If any adverse symptoms persist seek immediate medical attention.

### SECTION 5. Fire-Fighting Measures

Extinguishing Media: CO<sub>2</sub>, ABC extinguisher, or water spray.  
Special Fire Fighting Procedures: Separate from mass. Eliminate oxygen. Material is non-flammable. Use fire fighting measures appropriate to surrounding materials.  
Special Exposure Hazards: Cuprous oxide is stable in dry air, but can oxidize to cupric oxide in the presence of moist air at temperatures above 100°C.  
Additional Information: Collect contaminated fire fighting water separately.  
It must not enter the sewer system.  
Personal Protective Equipment: Wear self-contained breathing apparatus.

## SECTION 6. Accidental Release Measures

|                            |   |
|----------------------------|---|
| Personal Precautions:      | Spilled material may produce dust hazard if not handled correctly. Wear appropriate personal protective equipment: coveralls, gloves & eye protection.  |
| Environmental Precautions: | Do not allow to enter drains or watercourses. If the product enters drains or sewers, immediately inform the local water company. Where there is contamination of streams, rivers or lakes, contact local agency with responsibility for the environment. |
| Methods for Clean Up:      | Contain spillages and clean up with vacuum or conventional tools and attempt to minimize dusting. Place in a suitable container for recycling or disposal in accordance with local and national waste regulations.  |

## SECTION 7. Handling and Storage

|           |   |
|-----------|---|
| Handling: | Only use in a well-ventilated area and prevent the creation of dusts. If concentrations exceed the occupational exposure limits, use suitable respiratory protection. |
| Storage:  | Store in a cool, dry, well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep lids of container tightly sealed.                             |

## SECTION 8. Exposure Controls/Personal Protection

|                                      |   |
|--------------------------------------|---|
| Occupational Exposure Controls:      | All personal protective equipment, including respiratory equipment, used to control exposure to hazardous substances must be selected to meet the requirements of national personal protective equipment regulations. |
| Personal Protection:<br>Ventilation: | To keep below the U.S.A. OSHA and EU exposure limits, use general dilution type ventilation.  |
| Respiratory Protection:              | Cartridge type particulate filter respirator or dust-mask conforming to U.S.A. NIOSH. Refer to Respiratory Protective Devices approved by NIOSH under 42 CFR 84 and the appropriate European standard.                |
| Hand Protection:                     | Wear if skin contact is probable and skin is sensitive.   |
| Eye Protection:                      | Safety glasses or goggles.  |
| Skin Protection:                     | Long sleeve shirt(s) if contact is probable and skin is sensitive.  |
| Environmental Protection:            | Do not allow to enter drains or watercourses.   |

## SECTION 9. Physical and Chemical Properties

|                                       |                                 |                        |                   |
|---------------------------------------|---------------------------------|------------------------|-------------------|
| Appearance:                           | Brown Fine Powder               | Vapor Pressure:        | NA                |
| Odour:                                | None                            | Vapour Density:        | NA                |
| Boiling Point:                        | NA                              | Evaporation Rate:      | NA                |
| Melting Point:                        | 1235 °C                         | Solubility in Water:   | Negligible(<0.1%) |
| Specific Gravity (H <sub>2</sub> O=1) | 6.0                             | Percent Volatile (v/v) | 0%                |
| Bulk Density:                         | 1,500 – 2,000 kg/m <sup>3</sup> |                        |                   |

## SECTION 10. Stability and Reactivity

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

Conditions & Materials to Avoid:

- Temperatures above 100 °C while in the presence of moist air.
- Mass build up under reactive conditions.
- Under certain conditions Cu<sub>2</sub>O may react violently with strong reactants such as acids and bases.

Hazardous Decomposition Products: Copper fumes will be released if heated above its melting point (1235 °C).

Hazardous Polymerization: Will Not Occur

## SECTION 11. Toxicological Information

|                   |                      |                  |                                       |
|-------------------|----------------------|------------------|---------------------------------------|
| Acute Toxicity    |                      | Skin Irritation: | Not classified as a skin irritant     |
| Oral (Rat):       | Harmful if swallowed | Eye Irritation:  | Not classified as an eye irritant     |
| Dermal (Rabbit):  | Not classified       | Sensitization:   | Not classified as a dermal sensitizer |
| Inhalation (Rat): | Not classified       |                  |                                       |

## SECTION 12. Ecological Information

Toxic to fish and other aquatic organisms.  
Prevent from entering drains, sewers, and surface water.

### **SECTION 13. Disposal Considerations**

PACKAGING: Dispose of in accordance with procedures applying to the disposal of the product.  
PRODUCT: Dispose of surplus and contaminated materials (including sawdust) at an approved landfill or in accordance with other national or regional provisions.

### **SECTION 14. Transportation Information**

Proper Shipping Name: Not Regulated  
Hazard Class: Not Regulated

### **SECTION 15. Regulatory Information**

U.S. EPA EPCRA Section 313 Reportable Product – (contains copper)  
U.S. EPA Reportable Quantity: 5,000 lbs (2,270 kg)

### **SECTION 16. Other Information**

Keep out of reach of children. Read and follow all label instructions. This information is based on our present knowledge. However, 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.