



MATERIAL SAFETY DATA SHEET

REVISION NO. 2 June 2007

1. PRODUCT INFORMATION

Product Name : Cuprous Oxide
Chemical Symbol : Cu₂O
CAS No. : 1217-39-1
EINECS No. : 215-270-1

2. ITEM NO. : CU-1

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS NO.	UN NO
Cuprous Oxide	1217-39-1	-

4. HAZARDS

Health Hazard - Harmful if inhaled
Environmental - Marine Pollutant
Physical - Corrosion may result from humid atmosphere
Chemical - Prolonged contact with water may result copper dissolution in water – toxic risk

5. HANDLING AND STORAGE

HANDLING

- Avoid generation of dust clouds
- Keep work area clean
- Avoid accidental contact with halogens, acids and oxidizers

STORAGE

- Store in the supplied containers until used. Keep the lids tightly closed.
- Keep in closed dry room or store
- Storage temperature – no restrictions.

6. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits - Workplace Exposure
- Longterm exposure (TLV) – 8hrs TWA – 1mg/m³

Exposure Controls

- Respiratory Protection - A suitable face mask is recommended for those working with these materials. Use filter types preferably.
- Eye Protection – Required
- Skin Contact – Wear suitable gloves



7. FIRST AID MEASURES

- i) **Skin contact:** Wash off with plenty of water and remove contaminated clothing
- ii) **Eye contact:** Rinse with plenty of running water. Obtain medical attention if symptoms persist
- iii) **Ingestion:** If ingested rinse out mouth and then drink copious amount of water. **Induce vomiting.** Seek medical attention.
- iv) **Inhalation:** Move the victim to fresh air – consult a doctor if feeling unwell.

8. FIRE FIGHTING MEASURES

Suitable Extinguishing Agents:

- i) CO₂
- ii) Sand
- iii) Foam
- iv) Dry Chemical Powder

Unsuitable Extinguishing Agents

- i) Water jet – run off from fire control may cause water pollution

Unsuitable Extinguishing Agents:

- i) Water
- ii) Halogenated fire extinguisher

Special hazards caused by the substance, its products of combustion or resulting gases:

Not known

9. ACCIDENTAL RELEASE MEASURES

Environmental protection

Marine Pollutant. Toxic for aquatic organisms.

Measures for cleaning/collection spillages:

Clean up dry

10. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	- Solid
Form	- Amorphous powder
Color	- Dark Red
Odour	- Odourless
P.H.	- N/A
Boiling Temp.	- Decomposes at 1800°C
Melting Temp.	- 1235°C
Flash Point	- N/A
Autoflammability	- Product is not self igniting
Explosive properties	- Lower Explosive Limit (LEL) – No data
Min. Ignition Temp.	- No data available
Oxidising properties	- Will react exothermically if mixed with a strong oxidising substance
Real density	- 6.0gm/cm ³
Solubility	- Insoluble in water

11. STABILITY and REACTIVITY

Stability - Stable when dry. No decomposition

Reactivity - May react with acids or oxidising agents or halogens

Contact with acetylene, picrates, chlorates and oxides may be avoided.



12. TOXICOLOGICAL INFORMATION

Acute Toxicity - Oral 0.12mg/kg
Chronic Toxicity - TLV – 1mg/m³

13. ECOLOGICAL INFORMATION

Mobility/Degradability - Will convert to copper oxide during prolonged contact with water.

Ecotoxicity - Cuprous oxide is ecotoxic – marine pollutant

14. DISPOSAL CONSIDERATIONS

Waste : Dispose of in line with regional or national regulations.
Avoid product entering watercourses/sewer systems

15. TRANSPORT INFORMATION

Transport over land ADR/RID class - 9
Transport over sea IMDG class - 9
Transport over ICAO/IATA class - 9
Packaging group - III

Correct technical name: Environmentally Hazardous substance, solid, N.O.S., Marine Pollutant.

16. REGULATORY INFORMATION

Label: UN classification – 9 Harmful

Risks: Risks Phrase – 22, 36/37 R-22 Harmful if swallowed
R-36/37 Irritating to eyes and respiratory system.

Safety: Safety Phrase – 22, 25 S-22 Do not breathe dust
S-25 Avoid contact with eyes

17. OTHER INFORMATION

The information contained herein is based on the present state of our knowledge. It is believed to be reliable but no representation, guarantee of any kind are made.

18. CONTACT DETAILS: for any queries contact us at:

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