



MATERIAL SAFETY DATA SHEET

REVISION NO. 2, June 2007

1. PRODUCT INFORMATION

Product Name : Gold Bronze Powder (Copper powder)

Chemical Symbol : Cu
CAS No. : 7440-50-8
EINECS No. : 231-159-6

2. ITEM NO. : C1, C2, C4,RF7

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS NO.	UN NO
Copper	7440-50-8	3077

4. HAZARDS

Health Hazard - Harmful if inhaled
Environmental - Marine Pollutant
Physical - Corrosion may result from humid atmosphere

Chemical -

- **Toxic risk** - Prolonged contact with water may result copper dissolution in water

5. HANDLING AND STORAGE

HANDLING

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

STORAGE

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

6. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits - Workplace Concentration
- Longterm exposure (TLV) – 8 hrs 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



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 doctor, if feeling unwell

8. FIRE FIGHTING MEASURES

Suitable Extinguishing Agents:

- i) Dry Sand: gently smother burning material with dry sand
- ii) Foam
- iii) Carbon Dioxide cylinder
- iv) Dry Chemical Powder

Unsuitable Extinguishing Agents:

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

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

Not known

9. ACCIDENTAL RELEASE MEASURES

Personal Precautions

- Avoid generation of dusts. Do not inhale dusts

Environmental protection

Marine Pollutant. Toxic for aquatic organisms.

Measures for cleaning/collection spillages:

- a) Take up dry
- b) Forward for disposal. Clean up affected area

10. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	- Solid
Form	- Flaky Particles
Color	- Reddish Brown
Odour	- Odourless
P.H.	- N/A
Boiling Temp.	- 2324°C
Melting Temp.	- 1083°C
Flash Point	- N/A
Autoflammability	- Product is not self igniting
Explosive properties	- Lower Explosive Limit (LEL) – 1000g/m ³
Min. Ignition Temp.	– Cloud - 370°C Layer 190°C
Oxidising properties	- Will react exothermically if mixed with a strong oxidising substance
Real density	- 8.93gm/cm ³
Solubility	- Insoluble in water



11. STABILITY and REACTIVITY

- Stability** - Stable when dry
- Reactivity** - May react with acids or oxidising agents or halogens
Contact with acetylene, picrates, chlorates and azides should 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** - Gold Bronze 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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