CIL

**CULM-748** 

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## **CAMBRIDGE ISOTOPE LABORATORIES**

50 Frontage Road, Andover, Massachusetts 01810

Material Safety Data Sheet

PLEASE NOTE: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally unavailable, but are assumed to be similar or identical to the corresponding unlabeled compound. While the information contained is believed to be accurate, it does not claim to be all inclusive, and should be used only as a guide. CIL, Inc., extends no warranties with respect hereto and disclaims all liabilities from reliance thereon. Judgments as to the suitability of the data presented with respect to the use of the product are the responsibility of the purchaser and intended user.

SEP 11 2007 &

Section 1.

Chemical Product and Company Identification

CATALOG NO.

Copper-65 Metal

(65CU, 99.2%)

**CULM-748** 

Cambridge Isotope Laboratories, Inc.

50 Frontage Road Andover, MA 01810

USA.

Emergency Telephone No. USA: 1-800-424-9300

USA, for Information: (800) 322-1174

Emergency Telephone No.

INT: 1-202-483-7616 International, for Information:

(978) 749-8000

Date Prepared: 26-Aug-03

RTECS No.:

Supersedes: All previous. GL5325000

Section 2. Hazard. Ingredients/Identity Information Hazardous Components (Specific Chemical Identity, Common Names)

Chemical Names Copper-65 Metal

CAS Number

7440-50-8(unlabeled)

14191-84-5 14119-06-3

OSHA PEL Not established. ACGIH TLV Not established.

Section 3. Hazard Identification. Appearance:

Potential health effects:

Routes of Entry:

Symptoms of exposure:

Target organs: Warnings:

Red to brown solid. Not available.

Inhalation, ingestion, skin absorption. Not available.

Kidneys, liver, lungs.

Not available.

Section 4. First Aid Measures.

Eyes: On contact, immediately flush eyes

with lots of water for 15 minutes.

Eyes: (Separate eyelids with fingers when flushing.)

Swallowed: Wash out mouth with water if person is conscious.

Breathing: If breathing is difficult, give oxygen.

Not breathing: If not breathing, give artificial respiration.

Skin: On contact, flush skin with lots of soap and water.

Call a physician.

Section 5. Fire-Fighting Measures.

Extinguishing Media: Methods and cautions: Water spray, carbon dioxide, dry chemical powder or appropriate foam. Wear self-contained breathing apparatus and protective clothing.

Prevent contact with skin and eyes.

Flammable LEL:

Not available

Flammable UEL:

Not available.

Section 6. Accidental Release Measures.

Evacuate area. Wear self-contained breathing apparatus and protective clothing. Sweep up, place in bag, and hold for waste disposal. Avoid raising dust.

Ventilate area and wash spill site after material pickup is complete.

Hygiene warning:

Wash thoroughly after handling.

Respiratory protection:

Wear appropriate NIOSH/MSHA approved respirator.

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Section 7. Handling and Storage.

General warning:

Not available.

Handling procedures:

Avoid contact with eyes, skin, and clothing.

Storage procedures:

Store at room temperature away from light and moisture. Keep tightly closed.

Hygiene instructions:

Wash thoroughly after handling.

Use only in a chemical fume hood.

Section 8. Exposure Controls and Personal Protection.

General controls:

Do not breathe dust. Prevent contact with skin and eyes.

Eye/face protection:

Chemical safety goggles.

Skin Protection:

Wear suitable protective clothing.

Respiratory protection:

Wear appropriate NIOSH/MSHA approved respirator.

Section 9. Physical/Chemical Characteristics.

Molecular weight:

Varies by enrichment.

Autoignition temperature:

Not available.

Appearance:

Red to brown solid.

Flash point/Method:

Not available. 1083°C

Odor:

Not available.

Melting point: Boiling point:

2595°C

Physical state:

Solid.

Freezing point:

Not available.

pH: Vapor pressure:

Vapor density:

Not available.

1mm Hg 1628°C

Not available.

Insoluble.

Solubility in water: Specific gravity/density:

8.92

Section 10. Stability and Reactivity.

Chemical Stability:

Stable if stored under the recommended conditions.

Conditions to Avoid:

Not available. See Section 16

Incompatibilities:

Copper fumes.

Hazardous Decomposition: Hazardous Polymerization:

Not available.

Section 11. Toxicological Information (see Section 3 on first page).

Acute data:

Exposure to Copper-63 Metal can cause eyes and skin irritation. May cause skin discoloration. inhalation of fumes may cause metal fume fever, which is characterized by flue like symptoms wit metallic taste, fever, chills, cough, weakness, chest pain, muscle and decreased white cell count.

Causes respiratory tract irritation.

Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

May cause liver and kidney damage.

Chronic data:

Prolonged or repeated skin contact may cause dermatitis. May cause liver, kidney and lung

Section 12. Ecological Information (impact if released into environment).

Not available.

Section 13. Disposal Considerations.

Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

Section 14. Transport Information.

Follow all Federal, State and Local transportation guidelines.

Section 15. Regulatory Information.

Not available.

Section 16. Other Information.

Water, ammonium nitrate, bromates, iodates, chlorates, ethylene oxide, hydrazoid acid, potassium oxide, dimethyl sulfoxide, trichloroacetic, acid, hydrogen peroxide, sodium peroxide, sodium azide, sulfuric acid hydrogen sulfide, air, lead azide, chlorine, fluorine and actylenic.