

## SECTION 1. Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

**Product name:** Copper Reduction Reagent, Wires, 0.5 x 4mm, OEA

**Catalogue no:** R31050

**SDS reference no:** R31050

**Brand:** OEA Labs

**EC index no(s):**

**REACH no:** The annual tonnage does not require registration.

**CAS no(s):** Cu [7440-50-8]

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Identified uses:** Elemental analysis scientific instrumentation. Primary use for removal of excess oxygen from carrier gas analytical streams in nitrogen, carbon, hydrogen and sulphur configured applications. Not for pharmaceutical, domestic or other uses.

### 1.3 Details of the supplier of the safety data sheet

**Company name:** OEA Laboratories Limited  
Unit C2 Florence Road Business Park  
Kelly Bray, Callington, Cornwall  
PL17 8EX, United Kingdom

**Telephone:** +44 (0)1579 384174

**Fax:** +44 (0)1579 384174

**Email:** [sales@oealabs.com](mailto:sales@oealabs.com)

### 1.4 Emergency telephone number

**Telephone:** +44 (0)1579 384174, +44 (0) 1579 350212, +44 (0) 7811 102906

## SECTION 2. Hazards identification

### 2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

### 2.2 Labelling elements according to Regulation (EC) No 1272/2008

**Pictogram(s):**

**Signal word:**

**Hazard statement(s):**

- Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

**Precautionary statement(s):**

Restricted to professional users.

### 2.2 Other hazards

## SECTION 3. Composition/information of ingredients

### 3.1 Substances

**Synonyms:**

**Formula:** Cu

**Molecular weight:** 63.55g/mol

**Components:**

Copper Concentration: 100%

CAS No 7440-50-8, -, Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008, ;

## SECTION 4. First aid measures

### 4.1 Description of first aid measures

**General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If Inhaled:**

If breathed in, move person to fresh air. If not breathing give artificial respiration.

**In case of skin contact:**

Wash off with plenty of soap and water.

**In case of eye contact:**

Flush eyes with water as a precaution.

**If swallowed:**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**

Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has led to hemolytic anemia and accelerates arteriosclerosis.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5. Firefighting measures**

**5.1 Extinguishing media**

**Suitable extinguishing media:**

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

No data available.

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

No data available.

**SECTION 6. Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapors, mist or gas.

**6.2 Environmental precautions**

No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7. Handling and storage**

**7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store under inert gas. Air sensitive.

**7.3 Specific end uses**

No data available.

**SECTION 8. Exposure controls/personal protection**

**8.1 Control parameters**

**Components with workplace control parameters:**

Copper

CAS No 7440-50-8, Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008; STEL, 2mg/m3, UK, EH40 WEL; TWA, 1mg/m3, UK, EH40 WEL

**8.2 Exposure controls**

**Appropriate engineering controls:**

General industrial hygiene practice.

**Personal protective equipment:**

**Eye/face protection:**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and

the standard EN 374 derived from it.

**Body protection:**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental protection:**

No data available.

## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Form:** Wires or granules

**Colour:** Golden metallic, light red when tarnished

**Odour:** No data available

**Odour threshold:** No data available

**pH:** No data available

**Melting point:** 1,083.4 °C

**Boiling point:** 2,567 °C

**Flash point:** No data available

**Flammability solid/gas:** No data available

**Upper/lower flammability or explosive limits:** No data available

**Water solubility:** No data available

**Autoignition temp:** No data available

**Decomp temperature:** No data available

**Explosive properties:** No data available

**Oxidising properties:** No data available

### 9.2 Other safety information

No data available

## SECTION 10. Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

No data available

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong acids, Strong oxidizing agents, Acid chlorides, Halogens

### 10.6 Hazardous decomposition products

No data available

## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity:**

No data available

**Skin corrosion/irritation:**

No data available

**Serious eye damage/eye irritation:**

No data available

**Respiratory or skin sensitisation:**

No data available

**Germ cell mutagenicity:**

No data available

**Carcinogenicity:**

No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity:**  
No data available

**Specific target organ toxicity - single exposure:**  
No data available

**Specific target organ toxicity - repeated exposure:**  
No data available

**Aspiration hazard:**  
No data available

**Potential health effects - inhalation:**  
May be harmful if inhaled. May cause respiratory tract irritation.

**Potential health effects - ingestion:**  
May be harmful if swallowed.

**Potential health effects - skin:**  
May be harmful if absorbed through skin. May cause skin irritation.

**Potential health effects - eyes:**  
May cause eye irritation.

**Signs and symptoms of exposure:**  
Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.

**Additional information:**  
RTECS: GL5325000

**SECTION 12. Ecological information**

**12.1 Toxicity**

**Toxicity to fish:** No data available.

**Toxicity to daphnia and other aquatic invertebrates:** No data available.

**Toxicity to algae:** No data available.

**Toxicity to bacteria:** No data available.

**12.2 Persistence and degradability**  
No data available.

**12.3 Bioaccumulative potential**  
No data available.

**12.4 Mobility in soil**  
No data available.

**12.5 Results of PBT and vPvB assessment**  
No data available.

**12.6 Other adverse effects**  
No data available.

**SECTION 13. Disposal considerations**

**13.1 Waste treatment methods**

**Product:**  
Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:**  
Dispose of as unused product.

**SECTION 14. Transport information**

**14.1 UN number**

**ADR/RID/IATA/IMDG:** Not dangerous goods

**14.2 UN proper shipping name**

ADR/RID/IATA/IMDG: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID/IATA/IMDG: Not dangerous goods

**14.4 Packaging group**

ADR/RID/IATA/IMDG: Not dangerous goods

**14.5 Environmental hazards**

ADR/RID/IATA/IMDG: Not dangerous goods

**14.6 Special precautions for user**

Not dangerous goods

**14.7 Shipping quantities**

ADR LQ maximum: Not dangerous goods

ADR EQ code: Not dangerous goods

ADR EQ IP/pkg: Not dangerous goods

IATA LQ PInstruction: Not dangerous goods

IATA LQ IP/pkg: Not dangerous goods

IATA EQ code: Not dangerous goods

IATA EQ IP/pkg: Not dangerous goods

De minimus: Not dangerous goods

**SECTION 15. Regulatory information**

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available.

**15.2 Chemical safety assessment**

No data available.

**SECTION 16 Other information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. OEA Laboratories Limited shall not be held liable for any damage resulting from the handling or contact with the above product. See [www.oelabs.com](http://www.oelabs.com) for terms and conditions of sale.