ALADDIN SCIENTIFIC CORPORATION
14078 Meridian Parkway, Riverside, CA. 92518

# SAFETY DATA SHEET

Version: v2
Revision Date: 2026-07-03
Print Date: 2026-07-03

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

### 1.1 Product identifiers

| | |
|---|---|
| Product name | : Copper |
| Product Number | : C118570 |
| Brand | : aladdin |
| CAS-No. | : 7440-50-8 |

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

| | |
|---|---|
| Identified uses | : Laboratory chemicals,Manufacture of substances. |

### 1.3 Company

| | |
|---|---|
| Company | : ALADDIN SCIENTIFIC CORPORATION |
| Address | : 14078 Meridian Parkway, |
| Riverside, CA. 92518 | |
| Telephone | : +1 (833) 552-7181 |
| Fax | : no data available |

### 1.4 Emergency telephone number

| | |
|---|---|
| CHEMTREC®, Inside the USA | : 1-800-424-9300 |
| CHEMTREC®, Outside the USA | : |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Self-heating substances and mixtures: Category 1

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard: Category 1

### 2.2 GHS Label elements, including precautionary statements

| | |
|---|---|
| **Pictogram** |  |
| **Signal word** | Danger |
| **Hazard statement(s)** | |
| H251 | Self-heating; may catch fire |
| H410 | Very toxic to aquatic life with long lasting effects |
| **Precautionary statement(s)** | |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P235+P410 | Keep cool. Protect from sunlight. |
| P391 | Collect spillage. |
| P407 | Maintain air gap between stacks or pallets. |
| P420 | Store separately. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container to an approved waste disposal plant. |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

## SECTION 3: Composition/information on ingredients

## 3.1 Substances

| | |
|---|---|
| Synonyms | : N，N，N′，N′-Tetramethyl-O-(benzotriazol-1-yl)uronium tetrafluoroborate，TBTU |
| Formula | : Cu |
| Molecular weight | : 63.55 |
| CAS No. | : 7440-50-8 |
| EC-NO. | : 231-159-6 |

| Component | Classification | Concentration |
|---|---|---|
| **Copper** | | |
| | no data available | AR |

## 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 into fresh air.If not breathing, give artificial respiration.Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water.Consult a physician.

**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.Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 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.

**Unsuitable extinguishing media**

no data available

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

Copper oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting 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 vapours, mist or gas.Ensure adequate ventilation.Evacuate personnel to safe areas.For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.Do not let product enter drains.Discharge into the environment must be avoided.

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

Pick up and arrange disposal without creating dust.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

Further processing of solid materials may result in the formation of combustible dusts.The potential for combustible dust formation should be taken into consideration before additional processing occurs.Provide appropriate exhaust ventilation at places where dust is formed.For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place.Keep in a dry place.Storage class (TRGS 510): Non Combustible Solids.Store at room temperature;Desiccated;cool.

### 7.3 Specific end use(s)

no data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice.Wash hands before breaks and at the end of workday.

**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 gloves 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.

**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).

**Control of environmental exposure**

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| a) Appearance | form: powder color: Copper-colored |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | 1083.4 °C (lit.) |
| f) Initial boiling point and boiling range | 2567 °C (lit.) |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or explosive limits | no data available |
| k) Vapour pressure | no data available |
| l) Vapour density | no data available |
| m) Relative density | 8.94 |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties N | no data available |
| t) Oxidizing properties N | 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

Stable under recommended storage conditions.

### 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

In the event of fire: see section 5

## 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
**Additional Information**
no data available

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish mortality LOEC - Oncorhynchus mykiss (rainbow trout) - 0.022 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 0.15 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates mortality NOEC - Daphnia (water flea) - 0.004 mg/l - 24 h EC50 - Daphnia magna (Water flea) - 0.04 - 0.05 mg/l - 48 h

### 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

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.Very toxic to aquatic life.

### 12.6 Other adverse effects

no data available

## SECTION 13:

### 13.1 Disposal considerations

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

Dispose of as unused product.

## SECTION 14: Transport information

**DOT (US)**

| | | |
|---|---|---|
| UN number: UN 3189 | Packing group: II | Class: 4.2 |
| Proper shipping name: METAL POWDER, SELF-HEATING, N.O.S. (Copper nanopowder) | Reportable Quantity(RQ):no data available | Poison Inhalation Hazard:no data available |
| Environmental Hazards: No | | |

**IMDG**

| | | |
|---|---|---|
| UN number: UN 3189 | Packing group: II | EMS-No:no data available |
| Proper shipping name: METAL POWDER, SELF-HEATING, N.O.S. (Copper nanopowder) | | |

**IATA**

| | | |
|---|---|---|
| UN number: UN 3189 | Packing group: II | Class: 4.2 |
| Proper shipping name: METAL POWDER, SELF-HEATING, N.O.S. (Copper nanopowder) | | |

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## SECTION 16: Other information

| | |
|---|---|
| **Prepared By** | Regulatory Affairs<br>ALADDIN SCIENTIFIC CORPORATION<br>Email: QualityAssurance@aladdinsci.com |
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