

Safety Data Sheet

Section 1: Identification

Product Name: Deoxidized Copper

Manufacturer: Inweld Corporation

Address: 3962 Portland St, Coplay, PA 18037, UNITED STATES

Phone Number: (800) 346-5368

Emergency Phone Number: (800) 424-9300

Recommended Use: Industrial metal for welding, electrical components, and manufacturing.

Restrictions on Use: Not for household or consumer use.

Section 2: Hazard(s) Identification

Classification of the substance or mixture:

- **GHS Classification:**
 - Metal corrosion hazard (Category 2)
 - Acute toxicity (Category 4, oral)
 - Skin and eye irritation (Category 2)

Signal Word: Danger

Hazard Statements:

- May cause metal fume fever when heated to high temperatures.
- May cause irritation to eyes and skin.
- Harmful if swallowed.
- May cause respiratory irritation or lung damage when inhaled in high concentrations.

- May cause damage to organs through prolonged or repeated exposure.

Pictograms:



Precautionary Statements:

- **Prevention:**
 - Wear protective gloves, eye protection, and respiratory protection.
 - Avoid breathing dust, fumes, or vapor.
 - Wash thoroughly after handling.
 - Use only outdoors or in a well-ventilated area.
- **Response:**
 - If exposed or concerned: Get medical advice/attention.
 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - IF SWALLOWED: Call a poison center or doctor if you feel unwell.
- **Storage:**
 - Store in a well-ventilated place. Keep container tightly closed.
 - Store away from incompatible materials such as strong acids or bases.
- **Disposal:**
 - Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition/Information on Ingredients

Substance:

- **Chemical Name:** Copper, Deoxidized

- **Synonym(s):** Electrolytic Copper, Copper Alloy
- **CAS Number:** 7440-50-8
- **Content:** 100% Copper (Cu)

Hazardous Ingredients:

- None identified in the typical deoxidized copper alloy. Any potential hazardous effects result from inhalation of fumes, dust, or particles.

Section 4: First-Aid Measures

Inhalation:

- If inhaled, move the person to fresh air immediately. Seek medical attention if symptoms of metal fume fever, such as chills, fever, headache, or fatigue, persist.

Skin Contact:

- Wash exposed skin with soap and water. Seek medical attention if irritation persists.

Eye Contact:

- Immediately rinse eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion:

- Do not induce vomiting. Call a poison control center or seek immediate medical attention.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

- Use dry sand, dry chemical, or CO₂ fire extinguishers.
- DO NOT use water or foam as it may cause a violent reaction with molten metal.

Hazardous Combustion Products:

- Copper fumes may be released when heated to high temperatures.
- Toxic metal oxide fumes (e.g., copper oxide) may form.

Special Fire Fighting Procedures:

- Wear self-contained breathing apparatus (SCBA) and full protective clothing.
- Move containers from fire area if possible without risk.
- Keep water spray nearby for cooling of unexposed containers.

Section 6: Accidental Release Measures

Personal Precautions:

- Wear appropriate protective gear, including gloves, goggles, and a dust mask.
- Avoid inhalation of dust or fumes. Avoid skin and eye contact.

Environmental Precautions:

- Prevent material from entering drains or waterways.
- Avoid release to the environment.

Cleanup Procedures:

- Sweep or vacuum material for disposal.
- Avoid creating dust.
- Place in a suitable container for disposal.

Section 7: Handling and Storage

Handling:

- Handle in a well-ventilated area.
- Avoid breathing dust, vapor, or fume.
- Wear appropriate protective equipment to prevent exposure.
- Wash thoroughly after handling.

Storage:

- Store in a cool, dry, well-ventilated area.

- Keep tightly closed and away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

- OSHA PEL (TWA): 0.1 mg/m³ (copper dust and mist)

Engineering Controls:

- Use mechanical ventilation, especially in confined spaces, to minimize exposure to fumes or dust.
- Consider using local exhaust ventilation when working with heated copper or when generating dust.

Personal Protective Equipment (PPE):

- **Eyes:** Wear safety goggles or a face shield.
- **Skin:** Wear gloves and protective clothing to avoid skin contact.
- **Respiratory:** Use a NIOSH-approved dust mask or respirator if ventilation is insufficient.
- **Other:** Use appropriate protective equipment as necessary based on exposure risk.

Section 9: Physical and Chemical Properties

- **Appearance:** Shiny reddish-brown metal
- **Odor:** Odorless
- **Melting Point:** 1083°C (1981°F)
- **Boiling Point:** 2595°C (4703°F)
- **Density:** 8.96 g/cm³
- **Solubility in Water:** Insoluble
- **pH:** Not applicable

Section 10: Stability and Reactivity

Stability:

- Stable under normal conditions of use and storage.

Incompatibility:

- May react with strong acids, such as hydrochloric acid or sulfuric acid, to produce toxic copper salts.
- Avoid exposure to strong oxidizing agents.

Hazardous Decomposition Products:

- Copper oxide fumes, which are toxic and may cause respiratory issues.

Possibility of Hazardous Reactions:

- None under normal conditions of use and storage.

Section 11: Toxicological Information

- **Acute Toxicity:**
 - Inhalation: Inhalation of copper fumes or dust may cause metal fume fever with symptoms of chills, fever, and nausea.
 - Skin: May cause irritation on prolonged or repeated contact.
 - Eye: May cause irritation with symptoms of redness, pain, and watering.
- **Chronic Effects:**
 - Prolonged exposure to copper dust or fumes may lead to chronic respiratory issues, including asthma or bronchitis.
 - Repeated or prolonged exposure may cause liver and kidney damage.

Section 12: Ecological Information

- **Ecotoxicity:**
 - Copper is toxic to aquatic life in high concentrations.
 - Copper compounds may bioaccumulate in aquatic organisms.

- **Persistence and Degradability:**
 - Copper does not readily degrade and may persist in the environment.
- **Bioaccumulative Potential:**
 - Copper can bioaccumulate in aquatic organisms, leading to potential long-term environmental effects.
- **Other Adverse Effects:**
 - Harmful to the environment if released in large amounts.

Section 13: Disposal Considerations

- **Disposal Method:**
 - Dispose of in accordance with local, state, and federal regulations.
 - Do not dispose of into drains, sewers, or watercourses.
- **Waste Codes:**
 - Consult local waste disposal regulations.

Section 14: Transport Information

UN Number: Not regulated

Proper Shipping Name: Copper (Deoxidized)

Transport Hazard Class: Not regulated

Packing Group: N/A

Environmental Hazards: None identified.

Section 15: Regulatory Information

- **OSHA Hazard Communication Standard (HCS):**
 - This material is considered hazardous under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).
- **CERCLA:**

- Copper is not listed as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- **SARA Title III:**
 - Copper is not listed under Section 313 of SARA.

Section 16: Other Information

- **Preparation Date:** June 2, 2025
- **Revised Date:** June 2, 2025
- **Disclaimer:** The information provided in this Safety Data Sheet is believed to be accurate and reliable as of the date of publication. However, no warranty or guarantee is made as to the accuracy or completeness of the information.