

Safety Data Sheet

Section 1: Identification

- **Product Name:** Aluminum Bronze A-1
- **Manufacturer:** Inweld Corporation
- **Address:** 3962 Portland St, Coplay, PA 18037, UNITED STATES
- **Phone Number:** 1-800-346-5368
- **Emergency Phone Number:** (800) 424-9300
- **Product Use:** Alloy for use in manufacturing, machining, and welding.
- **Recommended Restrictions:** None

Section 2: Hazard(s) Identification

Classification:

- **Health Hazards:**
 - Skin Irritation: Category 2
 - Eye Irritation: Category 2A
 - Respiratory Sensitization: Category 1
 - Specific Target Organ Toxicity (Repeated Exposure): Category 1 (Lungs)
- **Physical Hazards:**
 - Combustible Dust

Label Elements:

- **Pictograms:**



- **Signal Word:** Danger

- **Hazard Statements:**

- May cause respiratory irritation.
- Causes skin irritation.
- Causes serious eye irritation.
- May cause damage to the lungs through prolonged or repeated exposure.
- May form combustible dust concentrations in air.

- **Precautionary Statements:**

- **Prevention:**

- Wear protective gloves, protective clothing, and eye protection.
- Avoid breathing dust/fumes/gas/mist/vapors/spray.
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Use only outdoors or in a well-ventilated area.

- **Response:**

- If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

- **Storage:**

- Store in a well-ventilated place. Keep container tightly closed.

- **Disposal:**

- Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition/Information on Ingredients

Chemical Name CAS Number % by Weight

Copper (Cu) 7440-50-8 85-95%

Aluminum (Al) 7429-90-5 5-10%

Iron (Fe) 7439-89-6 0-5%

Manganese (Mn) 7439-96-5 0-2%

Section 4: First-Aid Measures

- **Inhalation:** Remove person to fresh air. If symptoms persist, seek medical attention.
- **Skin Contact:** Wash affected area with soap and water. Seek medical attention if irritation develops.
- **Eye Contact:** Flush with water for 15 minutes while holding eyelids open. Seek medical attention if irritation persists.
- **Ingestion:** Not likely to occur, but if ingested, seek medical attention.

Section 5: Fire-Fighting Measures

- **Flammability:** Combustible dust.
- **Extinguishing Media:**
 - Dry chemical powder, CO₂, or foam.
 - Water can be used for cooling containers exposed to fire but may be ineffective in extinguishing the fire.
- **Fire Fighting Instructions:**
 - Wear self-contained breathing apparatus and full protective clothing.
 - Prevent dust clouds and vapors from igniting.

Section 6: Accidental Release Measures

- **Personal Precautions:** Wear appropriate protective equipment (PPE). Avoid inhaling dust.
- **Cleanup:** Sweep or vacuum up spilled material. Avoid generating dust. Place in an appropriate container for disposal.
- **Environmental Precautions:** Prevent release to the environment. Do not allow to enter drains or watercourses.

Section 7: Handling and Storage

- **Handling:**
 - Use in well-ventilated areas to prevent inhalation of dust.
 - Avoid generating dust or fumes.
- **Storage:**
 - Store in a cool, dry place. Keep container tightly closed.
 - Keep away from heat, sparks, and open flames.

Section 8: Exposure Controls/Personal Protection

- **Exposure Limits:**
 - Copper (Cu): 0.1 mg/m³ (OSHA TWA)
 - Aluminum (Al): 10 mg/m³ (OSHA TWA)
 - Manganese (Mn): 1 mg/m³ (OSHA TWA)
- **Engineering Controls:**
 - Provide adequate ventilation.
 - Use local exhaust ventilation if dust or fumes are generated.
- **Personal Protective Equipment (PPE):**
 - **Eye Protection:** Safety glasses with side shields.
 - **Skin Protection:** Protective gloves, long-sleeve clothing.

- **Respiratory Protection:** NIOSH-approved respirator for dust, fume, or mist if dust levels exceed permissible exposure limits (PELs).

Section 9: Physical and Chemical Properties

- **Appearance:** Bronze-colored metallic solid.
- **Odor:** Odorless.
- **Melting Point:** 950–1050°C (1742–1922°F)
- **Boiling Point:** Not applicable.
- **Solubility in Water:** Insoluble.
- **Flash Point:** Non-combustible.
- **Density:** 7.5–8.5 g/cm³

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions.
- **Conditions to Avoid:** Avoid heat, sparks, open flames.
- **Incompatible Materials:** Strong oxidizers (e.g., chlorine trifluoride, fluorine).
- **Hazardous Decomposition Products:** Oxides of copper and aluminum.

Section 11: Toxicological Information

- **Inhalation:** Prolonged exposure to high concentrations of dust or fumes can cause respiratory irritation or damage to the lungs.
- **Skin Contact:** May cause irritation, redness, and dryness.
- **Eye Contact:** Causes severe eye irritation.
- **Chronic Effects:** Prolonged or repeated exposure to dust or fumes may cause lung damage or other respiratory effects.

Section 12: Ecological Information

- **Ecotoxicity:** No specific data available, but material is expected to have low toxicity to aquatic life.
- **Persistence and Degradability:** Not applicable.
- **Bioaccumulative Potential:** Not expected to bioaccumulate.

Section 13: Disposal Considerations

- Dispose of in accordance with local, state, and federal regulations.
- Do not dispose of in sewers or water systems.

Section 14: Transport Information

- **UN Number:** Not regulated for transport.
- **Shipping Name:** Aluminum Bronze A-1
- **Hazard Class:** Not applicable.
- **Packing Group:** Not applicable.

Section 15: Regulatory Information

- **OSHA Hazard Communication Standard (HCS) (29 CFR 1910.1200):** This product is classified as hazardous based on the criteria of the Hazard Communication Standard.
- **EPA TSCA Inventory:** All ingredients are listed or exempt from listing.

Section 16: Other Information

- **Prepared By:** Inweld Corporation
- **Date of Issue:** 6/2/2025
- **Revision Number:** 1.0

- **Disclaimer:** The information provided in this SDS is believed to be accurate at the time of preparation. It is provided without warranty or guarantee of any kind. Always follow applicable safety standards.