

Safety Data Sheet

Section 1: Identification

- **Product Identifier:** Hi-Alloy 122
- **Recommended Use:** Welding filler metal
- **Restrictions on Use:** Use only as directed in industrial welding applications
- **Manufacturer:**
Inweld Corporation
3962 Portland St
Coplay, PA 18037
UNITED STATES
- **Telephone Number (General):** (800) 346-5368
- **Emergency Phone Number:** (800) 424-9300 (CHEMTREC)

Section 2: Hazard(s) Identification

Classification of the substance or mixture (GHS-US):

- **Carcinogenicity** – Category 1A
- **Specific Target Organ Toxicity – Repeated Exposure** – Category 2
- **Acute Toxicity (Inhalation)** – Category 4
- **Skin Irritation** – Category 2
- **Eye Irritation** – Category 2A
- **Reproductive Toxicity** – Category 2

Label Elements (GHS-US):

Signal Word: DANGER

Hazard Pictograms: 

Hazard Statements:

- H302: Harmful if swallowed
- H315: Causes skin irritation
- H319: Causes serious eye irritation
- H332: Harmful if inhaled
- H335: May cause respiratory irritation
- H351: Suspected of causing cancer
- H373: May cause damage to organs through prolonged or repeated exposure
- H361: Suspected of damaging fertility or the unborn child

Precautionary Statements:

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood
- P260: Do not breathe dust/fume/gas/mist/vapors/spray
- P264: Wash hands thoroughly after handling
- P271: Use only outdoors or in a well-ventilated area
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P308+P313: IF exposed or concerned: Get medical advice/attention
- P405: Store locked up
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations

Section 3: Composition/Information on Ingredients

Substance	CAS Number	% Composition (approx.)
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Chromium	7440-47-3	10 – 20%
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Nickel	7440-02-0	5 – 15%
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Substance	CAS Number	% Composition (approx.)
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Molybdenum	7439-98-7	2 – 5%
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Iron	7439-89-6	Balance
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Note: Composition may vary slightly based on lot; hazardous elements are present primarily in fume form during welding.

Section 4: First-Aid Measures

Inhalation: Move to fresh air. If breathing is difficult, administer oxygen and seek medical attention.

Skin Contact: Wash with plenty of soap and water. Seek medical advice if irritation persists.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

Ingestion: Do not induce vomiting. Seek medical attention.

Section 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Use extinguishing media suitable for surrounding fire
- **Special Hazards:** Welding arc can ignite combustibles
- **Protective Equipment:** Full protective equipment including self-contained breathing apparatus (SCBA)

Section 6: Accidental Release Measures

- Avoid generating dust
- Use appropriate PPE
- Ventilate area
- Collect material for disposal in accordance with local regulations

Section 7: Handling and Storage

- Handle in well-ventilated areas

- Use proper PPE during welding
- Store in a cool, dry place
- Keep container tightly closed when not in use

Section 8: Exposure Controls/Personal Protection

Component	OSHA PEL ACGIH TLV	
Chromium	1 mg/m ³	0.5 mg/m ³
Nickel	1 mg/m ³	1.5 mg/m ³
Molybdenum	15 mg/m ³	10 mg/m ³
Iron Oxide Fume	10 mg/m ³	5 mg/m ³ (as Fe)

Engineering Controls: Adequate ventilation or local exhaust

Respiratory Protection: Use NIOSH-approved respirators during welding

Eye Protection: Welding helmet or safety goggles

Skin Protection: Wear flame-resistant gloves and protective clothing

Section 9: Physical and Chemical Properties

- **Appearance:** Solid wire/rod
- **Color:** Metallic gray
- **Odor:** Odorless
- **Melting Point:** ~1400 – 1500°C
- **Solubility:** Insoluble in water
- **Flash Point:** Not applicable
- **Flammability:** Not flammable

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions

- **Hazardous Reactions:** None known
- **Incompatible Materials:** Strong acids and oxidizers
- **Hazardous Decomposition Products:** Metal oxide fumes, ozone, carbon monoxide during welding

Section 11: Toxicological Information

- **Likely Routes of Exposure:** Inhalation, skin and eye contact
- **Symptoms:** Irritation of respiratory system, metal fume fever, dermatitis
- **Carcinogenicity:**
 - Nickel: IARC Group 1 – Carcinogenic to humans
 - Chromium (hexavalent): IARC Group 1

Section 12: Ecological Information

- **Ecotoxicity:** May be toxic to aquatic life in fume form
- **Persistence and Degradability:** Not readily degradable
- **Bioaccumulation:** Possible for nickel and chromium compounds

Section 13: Disposal Considerations

- Dispose of in accordance with local, state, and federal regulations
- Avoid releasing dust or fumes into the environment

Section 14: Transport Information

- **UN Number:** Not regulated
- **Shipping Name:** Not classified as dangerous goods
- **Hazard Class:** Not applicable
- **Packing Group:** Not applicable

Section 15: Regulatory Information

- **OSHA Hazard Communication Standard:** This product is considered hazardous
- **SARA Title III:** Some ingredients are reportable under Section 313
- **California Proposition 65:** Contains substances known to the State of California to cause cancer and reproductive harm

Section 16: Other Information

- **Date of Issue:** July 2, 2025
- **Revision Number:** 1
- **Prepared by:** Inweld Corporation – Safety & Compliance Department