

Safety Data Sheet

Section 1: Identification

Product Identifier: Hi-Alloy 155/110W

Product Use: Filler metal / Welding electrode

Manufacturer: Inweld Corporation

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

Phone Number: (800) 346-5368

Emergency Phone Number (CHEMTREC): (800) 424-9300

Date of Preparation/Revision: July 2, 2025

Section 2: Hazard(s) Identification

Classification (GHS-US):

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

Signal Word: DANGER

Hazard Statements:

- H332: Harmful if inhaled
- H315: Causes skin irritation
- H320: Causes eye irritation
- H350: May cause cancer
- H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:

- P201: Obtain special instructions before use

- P261: Avoid breathing dust/fume/gas/mist/vapors/spray
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
- P308 + P313: IF exposed or concerned: Get medical advice/attention
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations

GHS Pictograms:



Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Weight %
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Chromium (Cr)	7440-47-3	5–30%
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Nickel (Ni)	7440-02-0	5–35%
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Iron (Fe)	7439-89-6	30–70%
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Molybdenum (Mo)	7439-98-7	2–15%
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Manganese (Mn)	7439-96-5	1–10%
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Note: Composition may vary slightly depending on product batch.

Section 4: First-Aid Measures

Inhalation: Move to fresh air. Seek medical attention if symptoms persist.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if irritation occurs.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if

present. Seek medical attention.

Ingestion: Not a likely route of exposure. Seek medical attention if symptoms develop.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Use dry chemical, CO₂, water spray, or foam.

Hazardous Combustion Products: Metal oxides, welding fumes

Protective Equipment: Firefighters should wear self-contained breathing apparatus (SCBA) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions: Avoid dust or fume inhalation. Use personal protective equipment.

Methods for Cleanup: Collect using non-sparking tools and place in appropriate container. Avoid creating dust.

Section 7: Handling and Storage

Handling: Use only in well-ventilated areas. Avoid contact with eyes, skin, and clothing. Avoid breathing fumes.

Storage: Store in a cool, dry, well-ventilated area. Keep away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Component	OSHA PEL	ACGIH TLV
Chromium	1 mg/m ³ (TWA)	0.5 mg/m ³ (TWA)
Nickel	1 mg/m ³ (TWA)	1.5 mg/m ³ (TWA)
Manganese	5 mg/m ³ (Ceiling)	0.02 mg/m ³ (TWA)
Iron Oxide	10 mg/m ³ (TWA)	5 mg/m ³ (TWA, fume)

Engineering Controls: Provide adequate local exhaust ventilation.

Personal Protective Equipment (PPE):

- Eye Protection: Safety glasses or goggles

- Skin Protection: Protective gloves and clothing
- Respiratory Protection: Use NIOSH-approved respirators during welding

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Metallic rods/wire
Odor	Odorless
Melting Point	>1200°C (varies)
Flash Point	Not applicable
Solubility in Water	Insoluble
Flammability	Non-flammable

Section 10: Stability and Reactivity

Reactivity: Not reactive under normal conditions.

Chemical Stability: Stable under recommended storage conditions.

Hazardous Reactions: None known

Incompatible Materials: Strong acids, strong oxidizers

Hazardous Decomposition Products: Metal oxides, welding fumes

Section 11: Toxicological Information

Likely Routes of Exposure: Inhalation, skin and eye contact

Symptoms: Irritation to eyes, nose, throat; long-term inhalation may cause lung effects

Carcinogenicity:

- Nickel and Chromium compounds: Listed by IARC and NTP as carcinogenic

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic life in large quantities

Persistence and Degradability: Not readily biodegradable

Bioaccumulative Potential: May bioaccumulate

Mobility in Soil: Low mobility

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations. Do not dispose of in drains or waterways.

Section 14: Transport Information

DOT (U.S.): Not regulated as hazardous for transport

UN Number: Not applicable

Proper Shipping Name: Not applicable

Hazard Class: Not applicable

Section 15: Regulatory Information

TSCA Inventory: All components are listed or exempt

SARA 313: This product contains substances (Chromium, Nickel, Manganese) subject to reporting

California Prop 65: This product contains chemicals known to the State of California to cause cancer

Section 16: Other Information

Prepared by: Inweld Corporation

Issue Date: July 2, 2025

Revision Notes: Initial SDS for Hi-Alloy 155/110W

Disclaimer: The information herein is believed to be accurate as of the date of issue. However, no warranty is expressed or implied regarding the accuracy or completeness of this information. Users are responsible for safe handling and use in accordance with applicable laws and regulations.