

Safety Data Sheet

Section 1: Identification

- **Product Identifier:** Hi-Alloy 360
- **Recommended Use:** Welding electrode/filler metal
- **Restrictions on Use:** Use only as directed for welding applications
- **Manufacturer:** Inweld Corporation
- **Address:** 3962 Portland St, Coplay, PA 18037, UNITED STATES
- **Phone Number (General Info):** (800) 346-5368
- **Emergency Phone Number (CHEMTREC):** (800) 424-9300
- **SDS Date:** July 2, 2025

Section 2: Hazard(s) Identification

- **Classification (GHS-US):**
 - Acute Toxicity, Inhalation – Category 4
 - Skin Irritation – Category 2
 - Eye Irritation – Category 2A
 - Carcinogenicity – Category 1A
 - Specific Target Organ Toxicity, Repeated Exposure – Category 2
- **Signal Word: Danger**
- **Hazard Statements:**
 - H332: Harmful if inhaled
 - H315: Causes skin irritation
 - H319: Causes serious 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
 - P264: Wash hands thoroughly after handling
 - P280: Wear protective gloves/protective clothing/eye protection/face protection
 - P302+P352: IF ON SKIN: Wash with plenty of water
 - P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
 - 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

Iron (Fe)	7439-89-6	40–60%
Chromium (Cr)	7440-47-3	10–20%
Nickel (Ni)	7440-02-0	10–15%
Manganese (Mn)	7439-96-5	1–5%
Silicon (Si)	7440-21-3	0.5–2%

Exact composition withheld as a trade secret.

Section 4: First-Aid Measures

- **Inhalation:** Remove to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing.
- **Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. Seek medical help.
- **Ingestion:** Not a likely route of exposure. If swallowed, seek medical attention.

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 full protective gear including NIOSH-approved SCBA

Section 6: Accidental Release Measures

- Avoid dust/fume inhalation
- Wear appropriate PPE
- Collect and place material into suitable containers for recycling or disposal
- Ventilate area

Section 7: Handling and Storage

- **Handling:** Use with adequate ventilation. Avoid breathing fumes or dust. Wear appropriate PPE.
- **Storage:** Store in a dry, cool, and well-ventilated place. Keep containers closed when not in use.

Section 8: Exposure Controls/Personal Protection

Component	OSHA PEL	ACGIH TLV
Iron Oxide	10 mg/m ³ (fume)	5 mg/m ³ (fume)
Chromium	1 mg/m ³	0.5 mg/m ³
Nickel	1 mg/m ³	1.5 mg/m ³ (inhalable)
Manganese	5 mg/m ³ (ceiling)	0.1 mg/m ³ (inhalable)

Engineering Controls: Use local exhaust ventilation.

Personal Protective Equipment (PPE):

- Eye Protection: Safety goggles
- Skin Protection: Protective gloves and clothing
- Respiratory Protection: Use NIOSH-approved respirator if exposure limits are exceeded

Section 9: Physical and Chemical Properties

- **Appearance:** Metallic rod or wire
- **Odor:** Odorless
- **Melting Point:** >1000°C (varies with alloy)
- **Solubility:** Insoluble in water
- **Boiling Point:** Not applicable
- **Flash Point:** Not applicable

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions
- **Reactivity:** Inert in solid form
- **Hazardous Reactions:** Fumes during welding may contain toxic metals
- **Incompatible Materials:** Strong acids, oxidizers

- **Hazardous Decomposition Products:** Metal oxides, fumes

Section 11: Toxicological Information

- **Routes of Exposure:** Inhalation, skin, eyes
- **Acute Effects:** Irritation to respiratory system, skin, and eyes
- **Chronic Effects:** Prolonged exposure may cause lung damage, metal fume fever, cancer (due to nickel and hexavalent chromium)
- **Carcinogenicity:**
 - Nickel – IARC Group 1 (Carcinogenic)
 - Chromium VI compounds – IARC Group 1

Section 12: Ecological Information

- Avoid release into the environment
- Not readily biodegradable
- Harmful to aquatic organisms in large quantities

Section 13: Disposal Considerations

- Dispose in accordance with local, state, and federal regulations
- Do not dump into sewers or waterways

Section 14: Transport Information

- **UN Number:** Not regulated as hazardous under DOT
- **Shipping Name:** Not applicable
- **Hazard Class:** Not applicable
- **Packing Group:** Not applicable

Section 15: Regulatory Information

- **OSHA HCS:** This product is considered hazardous
- **SARA 313:** Contains Nickel, Chromium, Manganese – subject to reporting
- **TSCA:** All components are listed

Section 16: Other Information

- **NFPA Rating:**
 - Health: 2
 - Flammability: 0
 - Reactivity: 0

Prepared By: Inweld Corporation – Safety & Compliance Department

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