

Safety Data Sheet

Section 1: Identification

Product Identifier:

Hi-Alloy 1300FC

Product Use:

Filler metal for welding applications

Manufacturer:

Inweld Corporation
3962 Portland St
Coplay, PA 18037
UNITED STATES

Phone Number (General Information):

(800) 346-5368

Emergency Phone Number (24-Hour):

CHEMTREC: (800) 424-9300

Recommended Use:

For industrial welding operations only.

Restrictions on Use:

Use only as directed. Use with proper ventilation and protective equipment.

Section 2: Hazard(s) Identification

Classification (GHS-US):

Hazard Category	Classification
Skin Sensitization	Category 1
Respiratory Sensitization	Category 1
Carcinogenicity	Category 1A

Hazard Category	Classification
Specific Target Organ Toxicity – Single	Category 3 (respiratory tract irritation)
Specific Target Organ Toxicity – Repeated	Category 2
Acute Toxicity – Inhalation	Category 4
Eye Irritation	Category 2B

Label Elements (GHS):

Signal Word:

DANGER

Hazard Pictograms:



Hazard Statements:

- H315: Causes skin irritation
- H317: May cause an allergic skin reaction
- H319: Causes eye irritation
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335: May cause respiratory irritation
- H351: Suspected of causing cancer (inhalation)
- H373: May cause damage to organs through prolonged or repeated exposure
- H332: Harmful if inhaled
- H401: Toxic to aquatic life

Precautionary Statements:

- **P201:** Obtain special instructions before use
- **P261:** Avoid breathing dust/fume/gas/mist/vapors/spray

- **P264:** Wash thoroughly after handling
- **P271:** Use only outdoors or in a well-ventilated area
- **P280:** Wear protective gloves/protective clothing/eye protection/face protection
- **P285:** In case of inadequate ventilation wear respiratory 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
- **P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- **P333+P313:** If skin irritation or rash occurs: Get medical advice/attention
- **P337+P313:** If eye irritation persists: Get medical advice/attention
- **P403+P233:** Store in a well-ventilated place. Keep container tightly closed
- **P501:** Dispose of contents/container in accordance with local/regional/national/international regulations

Section 3: Composition/Information on Ingredients

Ingredient	CAS Number	% (Approx.)	GHS Classification
Iron	7439-89-6	Balance	Not classified
Chromium (Cr)	7440-47-3	10–20%	Skin Sens. 1, Carc. 2, STOT RE 1
Nickel (Ni)	7440-02-0	5–10%	Carc. 1A, Skin Sens. 1
Manganese (Mn)	7439-96-5	1–5%	STOT RE 2
Silicon (Si)	7440-21-3	<1%	Not classified
Other proprietary alloys	N/A	<1%	May be hazardous

Note: Exact composition withheld as trade secret.

Section 4: First-Aid Measures

Inhalation:

Move to fresh air. Seek medical attention if symptoms persist. If breathing is difficult, give oxygen.

Skin Contact:

Wash skin thoroughly with soap and water. Remove contaminated clothing. Seek medical attention if rash or irritation develops.

Eye Contact:

Flush eyes with water for at least 15 minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Ingestion:

Not a typical route of exposure. Rinse mouth. Do not induce vomiting unless directed by medical personnel.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Use extinguishing media appropriate for surrounding fire (e.g., dry chemical, foam, CO₂, water spray).

Unsuitable Media:

None known.

Special Hazards:

Fumes or vapors from welding can be hazardous. Avoid breathing fumes.

Protective Equipment:

Wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions:

Wear suitable protective clothing, gloves, and eye/face protection. Avoid dust generation.

Environmental Precautions:

Avoid discharge into drains, surface water, or soil.

Cleanup Methods:

Sweep or vacuum up dust. Use non-sparking tools. Dispose of waste in accordance with regulations.

Section 7: Handling and Storage

Handling:

Avoid breathing dust/fume. Use adequate ventilation. Use personal protective equipment as required.

Storage:

Store in a dry, well-ventilated place away from incompatible materials. Keep container tightly closed.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

Component OSHA PEL		ACGIH TLV
Iron Oxide	10 mg/m ³ (fume)	5 mg/m ³ (respirable)
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 (fume)	0.02 mg/m ³ (resp.)

Engineering Controls:

Use local exhaust or general ventilation. Ensure adequate ventilation to maintain airborne levels below exposure limits.

Personal Protective Equipment:

- **Respiratory:** Use NIOSH-approved respirator if exposure exceeds limits.
- **Eyes:** Safety goggles or welding helmet.
- **Skin:** Wear protective gloves and flame-resistant clothing.

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Metallic flux-cored wire
Odor	Odorless
Odor Threshold	Not applicable
pH	Not applicable
Melting Point	>1000°C (1832°F)
Boiling Point	Not applicable
Flash Point	Not applicable
Flammability	Non-flammable
Vapor Pressure	Not applicable
Relative Density	~7.8 (water = 1)
Solubility	Insoluble in water
Auto-ignition Temperature	Not applicable

Section 10: Stability and Reactivity

Reactivity:

Not reactive under normal conditions.

Chemical Stability:

Stable under recommended storage and handling.

Hazardous Reactions:

None known.

Conditions to Avoid:

Avoid excessive heat, moisture.

Incompatible Materials:

Strong acids, oxidizers.

Hazardous Decomposition Products:

Welding fumes, metal oxides, ozone, and other potentially toxic substances.

Section 11: Toxicological Information

Likely Routes of Exposure:

Inhalation, skin contact, eye contact

Symptoms:

Irritation, coughing, allergic skin reactions, metal fume fever.

Carcinogenicity:

- **Nickel:** IARC Group 1 – Carcinogenic to humans
- **Chromium VI compounds:** IARC Group 1
- **Manganese:** May cause neurological effects with chronic exposure

Section 12: Ecological Information

Toxicity:

Toxic to aquatic organisms due to heavy metals.

Persistence/Degradability:

Not readily biodegradable.

Bioaccumulative Potential:

May bioaccumulate in aquatic organisms.

Mobility in Soil:

Low mobility in solid form.

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations. Do not release into environment. Waste should be tested for hazardous characteristics.

Section 14: Transport Information

DOT Classification:

Not regulated as hazardous under DOT for transport

UN Number:

Not applicable

Transport Hazard Class:

Not applicable

Packing Group:

Not applicable

Section 15: Regulatory Information

OSHA Hazard Communication Standard:

This product is hazardous under 29 CFR 1910.1200

SARA Title III:

- Section 313: Contains Chromium, Nickel, and Manganese

California Proposition 65:

- This product contains chemicals known to the State of California to cause cancer (Nickel, Chromium).

Section 16: Other Information

SDS Revision Date: September 22, 2025

Prepared by: Inweld Corporation

Disclaimer:

The information provided in this SDS is believed to be accurate and reliable. However, it is provided without warranty, express or implied, regarding its correctness. Users are responsible for determining the suitability of this product for their purposes and for complying with applicable laws and regulations.