

Safety Data Sheet

Section 1: Identification

Product Identifier:

Hi-Alloy 133

Other Means of Identification:

Welding Filler Metal (Electrode)

Recommended Use:

Welding applications

Restrictions on Use:

Use only as directed.

Manufacturer:

Inweld Corporation
3962 Portland St
Coplay, PA 18037
United States

Phone Number:

(800) 346-5368

Emergency Phone Number (CHEMTREC):

(800) 424-9300

Section 2: Hazard(s) Identification

Classification (GHS US):

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

- Reproductive Toxicity – Category 2

Signal Word:

DANGER

Hazard Statements:

- H302: Harmful if swallowed
- H317: May cause an allergic skin reaction
- H320: Causes eye irritation
- H332: Harmful if inhaled
- H335: May cause respiratory irritation
- H351: Suspected of causing cancer
- H361: Suspected of damaging fertility or the unborn child
- H373: May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P308+P313: If exposed or concerned: Get medical advice/attention
- P501: Dispose of contents/container in accordance with local regulations

GHS Pictograms:



Section 3: Composition/Information on Ingredients

Chemical Name CAS Number % by Weight

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

Note: Exposure to welding fumes may produce complex mixtures including those containing iron oxide, manganese, chromium (VI), and nickel compounds. Some components are carcinogenic and/or cause target organ toxicity.

Section 4: First-Aid Measures

Inhalation:

Remove person to fresh air. Seek medical attention if symptoms persist.

Skin Contact:

Wash thoroughly with soap and water. Remove contaminated clothing.

Eye Contact:

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

Ingestion:

Seek immediate medical attention. Do not induce vomiting.

Section 5: Fire-Fighting Measures

Extinguishing Media:

Use media appropriate for surrounding fire.

Special Hazards:

Welding arcs and sparks can ignite combustibles. Fumes may contain toxic metals.

Protective Equipment:

Firefighters should wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions:

Avoid inhalation of dust or fumes. Wear proper protective equipment.

Environmental Precautions:

Avoid discharge into drains and the environment.

Cleanup Methods:

Sweep or vacuum up spills. Avoid creating dust.

Section 7: Handling and Storage

Handling:

Use in well-ventilated areas. Avoid breathing fumes. Wear appropriate PPE.

Storage:

Store in a dry area away from moisture and incompatible materials.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

Component	OSHA PEL	ACGIH TLV
Iron Oxide	10 mg/m ³ (fume)	5 mg/m ³ (respirable)
Manganese	5 mg/m ³ (ceiling)	0.1 mg/m ³ (inhalable)
Nickel	1 mg/m ³	0.2 mg/m ³
Chromium (VI)	5 µg/m ³	0.5 µg/m ³

Engineering Controls:

Local exhaust ventilation and general ventilation.

Personal Protective Equipment (PPE):

- Respiratory protection (NIOSH-approved if exposure limits exceeded)
- Protective gloves

- Safety goggles or face shield
- Flame-resistant clothing

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Metallic rod/wire
Odor	Odorless
Melting Point	>1000°C (1832°F)
Solubility in Water	Insoluble
Flammability	Non-flammable (as sold)

Section 10: Stability and Reactivity

Reactivity:

Non-reactive under normal conditions

Chemical Stability:

Stable under normal conditions

Incompatible Materials:

Strong acids, oxidizers

Hazardous Decomposition Products:

Metal oxide fumes, ozone, and nitrogen oxides

Section 11: Toxicological Information

Routes of Exposure:

Inhalation, skin contact, eye contact

Symptoms:

Respiratory irritation, metal fume fever, skin sensitization, potential carcinogenic effects

Carcinogenicity:

- Nickel – IARC Group 1 (Carcinogenic to humans)
- Chromium VI – IARC Group 1
- Welding fumes – IARC Group 2B (Possibly carcinogenic)

Section 12: Ecological Information

Ecotoxicity:

Harmful to aquatic life with long-lasting effects

Persistence and Degradability:

Not readily biodegradable

Bioaccumulative Potential:

Nickel and chromium may bioaccumulate

Section 13: Disposal Considerations

Dispose in accordance with federal, state, and local environmental regulations. Do not dispose of in household waste.

Section 14: Transport Information

DOT (US):

Not regulated as hazardous

Section 15: Regulatory Information

TSCA:

All components are listed or exempt

SARA 313:

Contains nickel and chromium – subject to reporting

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer and reproductive harm.

Section 16: Other Information

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Prepared by: Inweld Corporation – Safety Compliance Division

Disclaimer:

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