

Safety Data Sheet

Section 1: Identification

Product Identifier:

23FC

Product Use:

Welding wire / filler metal

Manufacturer:

Inweld Corporation
3962 Portland St
Coplay, PA 18037
United States

Telephone Number:

(800) 346-5368

Emergency Telephone Number (24 hrs):

CHEMTREC: (800) 424-9300

Section 2: Hazard(s) Identification

Classification of the substance or mixture (GHS US):

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

Signal Word:

DANGER

Hazard Statements:

- H317: May cause an allergic skin reaction

- H350: May cause cancer
- H373: May cause damage to organs through prolonged or repeated exposure
- H332: Harmful if inhaled
- H361: Suspected of damaging fertility or the unborn child

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
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
- 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

GHS Pictograms:



Section 3: Composition/Information on Ingredients

Component	CAS Number	% by Weight
Iron	7439-89-6	80–95%
Manganese	7439-96-5	1–5%
Silicon	7440-21-3	0.5–2%
Chromium (Hexavalent)	18540-29-9	<0.1%
Nickel	7440-02-0	<1%

Component	CAS Number	% by Weight
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Others (proprietary)	—	<1%
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Exact percentages withheld as trade secret.

Section 4: First-Aid Measures

Inhalation:

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

Skin Contact:

Wash thoroughly with soap and water. Seek medical attention if irritation or rash develops.

Eye Contact:

Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

Ingestion:

Not a typical route of exposure. Seek medical attention if symptoms occur.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

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

Special Hazards Arising from the Substance:

Thermal decomposition may produce toxic fumes (metal oxides, welding fumes).

Protective Equipment:

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

Section 6: Accidental Release Measures

Personal Precautions:

Avoid contact with skin, eyes, and clothing. Wear appropriate PPE.

Environmental Precautions:

Prevent spillage from entering drains or waterways.

Cleanup Methods:

Sweep up and place in a suitable container for disposal. Avoid generating dust.

Section 7: Handling and Storage

Handling:

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

Storage:

Keep in a dry, cool, well-ventilated place. Keep container tightly closed.

Section 8: Exposure Controls/Personal Protection

Occupational Exposure Limits:

Substance	OSHA PEL	ACGIH TLV
Iron	10 mg/m ³ (fume)	5 mg/m ³ (resp.)
Manganese	5 mg/m ³ (Ceiling)	0.1 mg/m ³ (TWA)
Chromium VI	0.005 mg/m ³ (TWA)	0.05 mg/m ³ (TWA)
Nickel	1 mg/m ³ (TWA)	1.5 mg/m ³ (TWA)

Engineering Controls:

Use adequate ventilation, especially in confined areas.

Personal Protective Equipment (PPE):

- Eye: Safety goggles
- Skin: Protective gloves and clothing
- Respiratory: Use NIOSH-approved respirator if ventilation is inadequate

Section 9: Physical and Chemical Properties

- **Appearance:** Metallic wire
- **Odor:** Odorless

- **Boiling Point:** Not applicable
- **Melting Point:** ~1400°C (2552°F)
- **Flash Point:** Not applicable
- **Solubility in Water:** Insoluble
- **pH:** Not applicable
- **Vapor Pressure:** Not applicable

Section 10: Stability and Reactivity

Reactivity:

Non-reactive under normal conditions.

Chemical Stability:

Stable under recommended storage and handling conditions.

Hazardous Reactions:

None under normal use.

Incompatible Materials:

Strong acids, strong oxidizers.

Hazardous Decomposition Products:

Metal oxides, welding fumes.

Section 11: Toxicological Information

- **Routes of Exposure:** Inhalation, skin and eye contact
- **Acute Effects:** Irritation to eyes, skin, and respiratory tract
- **Chronic Effects:** Prolonged exposure may cause lung damage, cancer (due to Cr(VI), Ni), and reproductive harm
- **Carcinogenicity:**
 - **Nickel** – IARC Group 1 (Carcinogenic to humans)
 - **Cr(VI)** – IARC Group 1 (Carcinogenic to humans)

Section 12: Ecological Information

Ecotoxicity:

Harmful to aquatic life in large quantities

Persistence and Degradability:

Metals are persistent in the environment

Bioaccumulative Potential:

Some components may bioaccumulate

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations. Do not dispose of in the environment.

Section 14: Transport Information

DOT Classification:

Not regulated as hazardous for transport

Section 15: Regulatory Information

OSHA Hazard Communication Standard:

This product is classified as hazardous under 29 CFR 1910.1200.

SARA 313 Components:

Contains reportable quantities of manganese, nickel, and chromium compounds.

Section 16: Other Information

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Prepared by: Inweld Corporation

Disclaimer:

The information in this SDS is believed to be accurate and is provided in good faith. However, no warranty, express or implied, is made.