Inweld
Welding Alloys and Supplies

Safety Data Sheet

Section 1: Identification

Product Identifier:
Filler Metal – 439Ti

Other Means of Identification:
Stainless Steel Welding Wire / Rod – Type 439Ti

Recommended Use:
Arc welding filler metal for stainless steel

Manufacturer:
Inweld Corporation
3962 Portland St
Coplay, PA 18037
United States

Company Phone Number:
(800) 346-5368

Emergency Phone Number:
(800) 424-9300 (CHEMTREC – 24 hours)

Section 2: Hazard(s) Identification

Classification of the Substance or Mixture (GHS):

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

Signal Word:
DANGER

Hazard Statements:

- May cause cancer by inhalation

- Causes damage to lungs and respiratory system through prolonged or repeated exposure
- Harmful if inhaled
- Welding fumes and gases may be hazardous to health

Precautionary Statements:

- Obtain special instructions before use
- Do not breathe welding fumes or dust
- Use only with adequate ventilation or respiratory protection
- Wear protective gloves, clothing, eye and face protection
- In case of inadequate ventilation, wear respiratory protection

GHS Hazard Pictograms

Section 3: Composition/Information on Ingredients

Substance: Mixture (Solid stainless steel welding wire)

Composition by Individual Wire Classification

ER439 / ER439Ti Stainless Steel Welding Wire

Component	CAS Number	Typical % (wt.)
Iron (Fe)	7439-89-6	Balance
Chromium (Cr)	7440-47-3	17.0 – 19.0
Titanium (Ti)	7440-32-6	0.10 – 0.50
Carbon (C)	7440-44-0	≤ 0.03
Manganese (Mn)	7439-96-5	≤ 1.00
Silicon (Si)	7440-21-3	≤ 1.00

Component	CAS Number	Typical % (wt.)
Phosphorus (P)	7723-14-0	≤ 0.04
Sulfur (S)	7704-34-9	≤ 0.03

Note: Composition may vary slightly by product form and wire diameter.

Section 4: First-Aid Measures

Inhalation:
Remove person to fresh air. If breathing is difficult, administer oxygen and seek medical attention.

Skin Contact:
Wash with soap and water. Molten metal may cause thermal burns—seek immediate medical attention.

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

Ingestion:
Not a normal route of exposure. Seek medical attention if swallowed.

Most Important Symptoms:
Respiratory irritation, metal fume fever symptoms, lung damage with prolonged exposure.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:
Use extinguishing media appropriate for surrounding fire (CO_2, dry chemical, foam).

Specific Hazards:
Welding fumes may contain toxic metal oxides.

Protective Equipment:
Firefighters should wear self-contained breathing apparatus.

Section 6: Accidental Release Measures

Solid product – no special cleanup required.
Avoid generating dust. Collect mechanically if applicable.

Section 7: Handling and Storage

Handling:

Use with adequate ventilation. Avoid breathing fumes. Follow safe welding practices.

Storage:

Store in a dry location away from acids and oxidizers.

Section 8: Exposure Controls/Personal Protection

Exposure Limits (OSHA PEL / ACGIH TLV):

- Chromium (metal): 0.5 mg/m^3
- Iron Oxide Fume: 5 mg/m^3
- Manganese: 0.1 mg/m^3 (ACGIH)

Engineering Controls:

Local exhaust ventilation recommended.

Personal Protective Equipment (PPE):

- Respiratory protection (as required)
- Welding helmet with proper filter
- Gloves and protective clothing

Section 9: Physical and Chemical Properties

- Appearance: Metallic solid wire/rod
- Odor: Odorless
- Melting Point: ~1400°C
- Solubility: Insoluble in water

Section 10: Stability and Reactivity

- Stable under normal conditions
- Avoid strong acids and oxidizers
- Hazardous decomposition products: metal oxides, fumes

Section 11: Toxicological Information

- Inhalation of welding fumes may cause metal fume fever
- Chromium compounds in fumes may cause cancer
- Prolonged exposure may damage lungs

Section 12: Ecological Information

No specific data available. Avoid release to environment.

Section 13: Disposal Considerations

Dispose in accordance with local, state, and federal regulations.

Section 14: Transport Information

Not regulated as a hazardous material for transport.

Section 15: Regulatory Information

- OSHA Hazard Communication Standard: Hazardous
- Contains chromium – subject to reporting requirements

Section 16: Other Information

Preparation Date: 1/5/2026

Prepared For: Inweld Corporation

Disclaimer: This SDS is provided for information and safety guidance only. The user is responsible for compliance with applicable regulations.