

Safety Data Sheet

Section 1: Identification

Product Identifier: 308L-16, 309L-16, 316L-16

Manufacturer Name: Inweld Corporation

Address: 3962 Portland St, Coplay, PA 18037, UNITED STATES

Phone Number: (800) 346-5368

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

Recommended Use: Welding electrode for stainless steel

Restrictions on Use: Use only as directed

Section 2: Hazard(s) Identification

Classification:

- **Carcinogenicity** – Category 1B
- **Specific Target Organ Toxicity – Repeated Exposure** – Category 1
- **Acute Toxicity (Inhalation, Dust/Fume)** – Category 4
- **Skin Sensitization** – Category 1
- **Respiratory Sensitization** – Category 1

Signal Word: DANGER

Hazard Statements:

- H350: May cause cancer (inhalation).
- H372: Causes damage to organs through prolonged or repeated exposure (lungs).
- H332: Harmful if inhaled.
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H317: May cause an allergic skin reaction.

Pictograms:



Precautionary Statements:

- P201: Obtain special instructions before use.
- P260: Do not breathe 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.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	% by Weight
Iron (Fe)	7439-89-6	Balance
Chromium (Cr)	7440-47-3	18–24%
Nickel (Ni)	7440-02-0	8–14%
Manganese (Mn)	7439-96-5	1–2%
Silicon (Si)	7440-21-3	<1%
Molybdenum (Mo) (316L only)	7439-98-7	2–3%

Exact percentages vary by electrode type.

Section 4: First-Aid Measures

Inhalation:

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

Skin Contact:

Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation occurs.

Eye Contact:

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

Ingestion:

Not a likely route of exposure. Seek medical advice if swallowed.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Hazards from Combustion Products: Metal oxides, welding fumes, toxic gases.

Protective Equipment: Wear full protective gear and NIOSH-approved self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Personal Precautions: Avoid dust and fume exposure. Use appropriate PPE.

Environmental Precautions: Prevent entry into waterways.

Methods for Cleanup: Collect material mechanically and dispose of per local regulations.

Section 7: Handling and Storage

Handling:

Use with adequate ventilation. Avoid breathing fumes/dust. Wear protective gear.

Storage:

Store in a dry, well-ventilated area. Keep away from incompatible materials (strong acids, oxidizers).

Section 8: Exposure Controls/Personal Protection

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 (metal)
Nickel	1 mg/m ³	1.5 mg/m ³
Manganese	5 mg/m ³ ceiling	0.1 mg/m ³

Engineering Controls: Use local exhaust ventilation during welding.

Personal Protective Equipment:

- **Respiratory:** NIOSH-approved respirator as required.
- **Eye/Face:** Safety glasses or welding helmet with proper shade.
- **Skin/Body:** Flame-resistant clothing, welding gloves.

Section 9: Physical and Chemical Properties

- **Appearance:** Gray metallic rods
- **Odor:** Odorless
- **Melting Point:** Approx. 1350–1400°C
- **Solubility:** Insoluble in water
- **Flash Point:** Not applicable
- **Vapor Pressure:** Not applicable

Section 10: Stability and Reactivity

Stability: Stable under normal conditions.

Reactivity: Not reactive under normal use.

Incompatible Materials: Strong oxidizers, acids.

Decomposition Products: Metal oxides, ozone, nitrogen oxides during welding.

Section 11: Toxicological Information

- **Likely Routes of Exposure:** Inhalation, skin contact
- **Acute Effects:** Irritation, metal fume fever
- **Chronic Effects:** Lung damage, cancer (from inhalation of nickel, hexavalent chromium)
- **Carcinogenicity:**
 - Nickel – IARC Group 1 (carcinogenic)
 - Chromium (Cr VI compounds) – IARC Group 1

Section 12: Ecological Information

No available data on environmental toxicity for finished product. Avoid uncontrolled release.

Section 13: Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Do not allow to enter drains or water systems.

Section 14: Transport Information

UN Number: Not regulated

Hazard Class: Not applicable

Shipping Name: Not classified as dangerous goods

Section 15: Regulatory Information

- **OSHA HCS (29 CFR 1910.1200):** Hazardous
- **SARA 313:** Contains regulated substances (Nickel, Chromium, Manganese)
- **TSCA:** Components listed

Section 16: Other Information



SDS Preparation Date: July 1, 2025

Version: 1.0

Disclaimer:

The information provided in this SDS is correct to the best of our knowledge. The data is intended to describe the product for purposes of health, safety, and environmental requirements only.