

Safety Data Sheet

Section 1: Identification

- **Product Identifier:** HF506, HF501
- **Other Means of Identification:** Hardfacing Filler Metals
- **Recommended Use:** Welding applications
- **Restrictions on Use:** Use only as directed. For industrial use only.
- **Manufacturer:**
Inweld Corporation
3962 Portland St
Coplay, PA 18037
UNITED STATES
- **Phone Number:** (800) 346-5368
- **Emergency Phone Number (24 hrs):** (800) 424-9300 (CHEMTREC)
- **SDS Date:** July 1, 2025

Section 2: Hazard(s) Identification

- **Classification:**
 - Carcinogenicity – Category 1B
 - Specific Target Organ Toxicity (Repeated Exposure) – Category 2
 - Acute Toxicity (Inhalation) – Category 4
 - Skin Irritation – Category 2
 - Eye Irritation – Category 2B
- **Signal Word:** Danger
- **Hazard Statements:**
 - H302: Harmful if swallowed

- H315: Causes skin irritation
- H320: Causes eye irritation
- H332: Harmful if inhaled
- H351: Suspected of causing cancer
- H373: May cause damage to organs through prolonged or repeated exposure

- **Pictograms:**



- **Precautionary Statements:**

- **Prevention:**

- Do not breathe fumes or dust.
 - Wear protective gloves/protective clothing/eye protection.
 - Wash hands thoroughly after handling.
 - Use only outdoors or in a well-ventilated area.

- **Response:**

- IF INHALED: Remove person to fresh air and keep comfortable.
 - IF ON SKIN: Wash with plenty of soap and water.
 - IF IN EYES: Rinse cautiously with water for several minutes.
 - IF exposed or concerned: Get medical advice/attention.

- **Storage:**

- Store locked up.

- **Disposal:**

- Dispose of contents/container in accordance with local/regional/national regulations.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	% Weight
Chromium	7440-47-3	5–20%
Manganese	7439-96-5	1–10%
Iron	7439-89-6	Balance
Silicon	7440-21-3	0.5–3%
Nickel (may be present)	7440-02-0	<1%

Note: Exposure to welding fumes may generate additional hazardous substances including hexavalent chromium and ozone.

Section 4: First-Aid Measures

- **Inhalation:** Remove to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing.
- **Eye Contact:** Rinse cautiously with water. Remove contact lenses if present. Seek medical attention if irritation persists.
- **Ingestion:** Rinse mouth. Do not induce vomiting. Seek medical attention.
- **Most Important Symptoms:** Respiratory irritation, skin/eye irritation, potential cancer risk.

Section 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Use dry chemical, CO₂, water spray or foam.
- **Unsuitable Media:** None known.
- **Hazards:** Fumes from metal oxides may be hazardous.
- **Protective Equipment:** Wear full protective gear and self-contained breathing apparatus.

Section 6: Accidental Release Measures

- **Personal Precautions:** Avoid contact with dust or fumes. Use appropriate PPE.
- **Methods for Cleanup:** Sweep up material and place in suitable containers for disposal. Avoid generating dust.
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so.

Section 7: Handling and Storage

- **Handling:** Use adequate ventilation. Avoid skin and eye contact. Do not inhale fumes.
- **Storage:** Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed.

Section 8: Exposure Controls/Personal Protection

- **Exposure Limits (ACGIH/TLV & OSHA PELs):**

Substance	ACGIH TLV	OSHA PEL
Chromium	0.5 mg/m ³	1 mg/m ³
Manganese	0.1 mg/m ³	5 mg/m ³ (ceiling)
Iron Oxide	5 mg/m ³ (dust/fume)	10 mg/m ³
Nickel	1.5 mg/m ³	1 mg/m ³

- **Engineering Controls:** Use local exhaust ventilation during welding.
- **PPE:**
 - Respiratory: Use NIOSH-approved respirator if ventilation is inadequate.
 - Eye: Safety goggles or face shield.
 - Hands: Welding gloves.
 - Skin/Body: Flame-resistant protective clothing.

Section 9: Physical and Chemical Properties

- **Appearance:** Metallic rods or wires
- **Color:** Gray or silver
- **Odor:** Odorless
- **Melting Point:** ~1400–1600°C
- **Boiling Point:** Not applicable
- **Flash Point:** Not applicable
- **Solubility in Water:** Insoluble
- **Density:** Varies with composition

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions
- **Hazardous Reactions:** None under normal use
- **Incompatible Materials:** Strong acids, oxidizing agents
- **Decomposition Products:** Metal fumes, oxides of chromium, manganese, and other elements

Section 11: Toxicological Information

- **Likely Routes of Exposure:** Inhalation, skin contact, eye contact
- **Acute Effects:** Irritation to eyes, skin, and respiratory tract
- **Chronic Effects:** May cause lung damage. Hexavalent chromium and nickel compounds are classified as carcinogens.
- **Carcinogenicity:**
 - **IARC:** Chromium(VI), Nickel – Group 1 (Carcinogenic)
 - **NTP:** Known to be human carcinogens

Section 12: Ecological Information

- **Ecotoxicity:** Harmful to aquatic life in large quantities
- **Persistence/Degradability:** Not readily biodegradable
- **Bioaccumulative Potential:** Low
- **Mobility in Soil:** Low

Section 13: Disposal Considerations

- Dispose of in accordance with local, state, and federal regulations.
- Do not dump into sewers or waterways.
- Waste may be classified as hazardous depending on use and contamination.

Section 14: Transport Information

- **UN Number:** Not regulated
- **DOT Shipping Name:** Not regulated as hazardous
- **Hazard Class:** None
- **Packing Group:** Not applicable
- **Marine Pollutant:** No

Section 15: Regulatory Information

- **OSHA HCS:** Hazardous
- **TSCA:** Components listed
- **SARA 313:** Chromium, Manganese, and Nickel compounds are reportable
- **California Prop 65:** WARNING – This product can expose you to chemicals including chromium and nickel, which are known to the State of California to cause cancer.

Section 16: Other Information

- **Prepared by:** Inweld Corporation – Compliance Department

- **Phone:** (800) 346-5368
- **SDS Revision Date:** July 1, 2025
- **Disclaimer:** The information provided in this SDS is believed to be correct as of the date of issue. It is provided in good faith but without warranty of any kind.