

Safety Data Sheet

Section 1: Identification

Product identifier: Hi-Alloy Marvel Weld

Recommended use: Filler metal for welding applications

Restrictions on use: For industrial use only

Manufacturer: Inweld Corporation

Address: 3962 Portland St, Coplay, PA 18037, USA

Emergency Phone: (800) 424-9300

Phone: (800) 346-5368

Section 2: Hazard(s) Identification

Classification (GHS):

- Carcinogenicity, Category 1A
- Respiratory Sensitization, Category 1
- Skin Sensitization, Category 1
- Specific Target Organ Toxicity — Repeated Exposure, Category 1
- Acute Toxicity, Inhalation, Category 4
- Serious Eye Damage/Eye Irritation, Category 2A

Signal word: Danger

Hazard statements:

- May cause cancer (inhalation).
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- Harmful if inhaled.
- Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

- Avoid breathing dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
- If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Store locked up.
- Dispose of contents/container in accordance with local regulations.

GHS Hazard Pictograms:



Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Concentration (%)	Notes
Nickel	7440-02-0	40-60	Carcinogen, sensitizer
Chromium	7440-47-3	10-30	Carcinogen
Iron	7439-89-6	20-40	
Manganese	7439-96-5	1-5	
Other alloying elements —		<5	Proprietary blend

Section 4: First-Aid Measures

Inhalation:

Remove person to fresh air and keep comfortable for breathing. If symptoms persist, seek medical attention.

Skin contact:

Wash affected area thoroughly with soap and water. Remove contaminated clothing. If irritation or rash develops, get medical advice.

Eye contact:

Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.

Ingestion:

Do NOT induce vomiting. Rinse mouth with water. Seek immediate medical attention.

Section 5: Fire-Fighting Measures

Suitable extinguishing media: Use dry chemical, CO₂, or foam. Do not use water jets.

Specific hazards: Emits toxic fumes under fire conditions (metal oxides, chromium, nickel compounds).

Protective equipment: Firefighters should wear full protective gear and self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Personal precautions: Use appropriate personal protective equipment (PPE). Avoid dust formation.

Environmental precautions: Prevent material from entering drains or waterways.

Methods for cleanup: Sweep up and place in suitable container for disposal. Avoid generating dust.

Section 7: Handling and Storage

Handling:

Avoid inhalation of dust/fume. Use in well-ventilated areas. Use proper PPE.

Storage:

Store in a cool, dry place away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Exposure limits:

- Nickel: OSHA PEL 1 mg/m³ (as Ni)
- Chromium (VI): OSHA PEL 0.005 mg/m³
- Manganese: OSHA PEL 5 mg/m³ (Ceiling)

Engineering controls: Use local exhaust ventilation.

Personal protective equipment:

- Respiratory protection: NIOSH-approved respirator if ventilation is insufficient.
- Gloves: Chemical resistant gloves.
- Eye protection: Safety goggles or face shield.
- Skin protection: Protective clothing.

Section 9: Physical and Chemical Properties

- Appearance: Solid wire or rod, metallic color
- Odor: None
- Melting point: Approx. 1400 - 1450 °C (depends on alloy composition)
- Boiling point: Not applicable
- Vapor pressure: Not applicable
- Solubility: Insoluble in water

Section 10: Stability and Reactivity

Reactivity: Stable under normal conditions.

Conditions to avoid: Avoid excessive heat and moisture.

Incompatible materials: Strong acids, bases, and oxidizing agents.

Hazardous decomposition products: Metal oxides, toxic fumes upon combustion.

Section 11: Toxicological Information

- May cause respiratory and skin sensitization.
- Classified as a carcinogen due to nickel and chromium content.
- Prolonged exposure may cause lung damage and other organ toxicity.

Section 12: Ecological Information

- Not expected to be harmful to aquatic organisms at typical release levels.
- Prevent material from entering water systems.

Section 13: Disposal Considerations

Dispose of in accordance with local, state, and federal regulations. Avoid release to environment.

Section 14: Transport Information

- DOT: Not regulated as hazardous for transport.

Section 15: Regulatory Information

- Contains substances subject to reporting under SARA Title III, CERCLA, and other regulations.

Section 16: Other Information

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