

Safety Data Sheet

Section 1: Identification

Product Name: Hi-Alloy Steel Bond 88

Manufacturer: Inweld Corporation

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

Phone Number: (800) 346-5368

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

Recommended Use: Filler metal for welding/brazing steel alloys

Restrictions on Use: Use only as directed; industrial use only

Section 2: Hazard(s) Identification

Classification (GHS):

- Carcinogenicity: Category 1A
- Specific Target Organ Toxicity (Repeated Exposure): Category 1
- Acute Toxicity (Inhalation): Category 4
- Skin Irritation: Category 2
- Eye Irritation: Category 2A
- Respiratory Sensitization: Category 1

Signal Word: Danger

Hazard Statements:

- May cause cancer (inhalation of fumes and dust).
- Causes skin irritation.
- Causes serious eye irritation.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Causes damage to organs through prolonged or repeated exposure.

- Harmful if inhaled.

Precautionary Statements:

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves, eye protection, and respiratory protection.
- Avoid breathing dust/fume/gas/mist/vapors/spray.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF ON SKIN: Wash with plenty of water.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- Get medical advice/attention if you feel unwell or if skin or eye irritation persists.
- Store locked up.
- Dispose of contents/container in accordance with local regulations.

GHS Hazard Pictograms:



Section 3: Composition/Information on Ingredients

Component	CAS Number	Concentration (%)	Notes
Nickel	7440-02-0	40-60	Known carcinogen
Chromium	7440-47-3	20-30	Known carcinogen
Iron	7439-89-6	10-20	
Other alloying metals	Various	Balance	

Section 4: First-Aid Measures

Inhalation:

Remove person to fresh air. If breathing is difficult, administer oxygen. Seek medical attention immediately.

Skin Contact:

Wash affected area thoroughly with soap and water. Remove contaminated clothing. If irritation persists, seek medical attention.

Eye Contact:

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

Ingestion:

Rinse mouth. Do NOT induce vomiting. Seek medical attention immediately.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Use dry chemical, CO₂, water spray, or foam.

Specific Hazards: Product may emit toxic fumes when heated.

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

Section 6: Accidental Release Measures

Personal Precautions: Use appropriate personal protective equipment.

Environmental Precautions: Prevent entry into waterways, sewers, or soil.

Cleanup Methods: Sweep up material and place in a suitable container for disposal. Avoid generating dust.

Section 7: Handling and Storage

Handling:

Use only in well-ventilated areas. Avoid inhalation of fumes and dust. Wear protective gloves, eye protection, and respiratory protection.

Storage:

Store in a cool, dry place. Keep container tightly closed when not in use.

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

- Nickel: OSHA PEL 1 mg/m³ (as Ni)
- Chromium (VI): OSHA PEL 0.005 mg/m³
- Iron: OSHA PEL 10 mg/m³ (total dust)

Engineering Controls: Use local exhaust ventilation.

Personal Protective Equipment:

- Respiratory protection: NIOSH-approved respirator if ventilation is inadequate.
- Skin protection: Protective gloves.
- Eye protection: Safety goggles or face shield.

Section 9: Physical and Chemical Properties

- **Appearance:** Solid wire or rod
- **Color:** Silver-gray metallic
- **Odor:** Odorless
- **Melting Point:** ~1450 °C (approximate)
- **Boiling Point:** Not applicable
- **Solubility:** Insoluble in water

Section 10: Stability and Reactivity

- **Stability:** Stable under normal conditions.
- **Conditions to Avoid:** Excessive heat, incompatible materials.
- **Incompatible Materials:** Strong acids, strong oxidizers.

- **Hazardous Decomposition Products:** Toxic metal fumes.

Section 11: Toxicological Information

- **Routes of Exposure:** Inhalation, skin, and eye contact.
- **Symptoms:** Respiratory irritation, skin irritation, eye irritation, sensitization, and long-term carcinogenic effects.
- **Chronic Effects:** Nickel and chromium compounds are carcinogenic; may cause respiratory sensitization and lung damage.

Section 12: Ecological Information

- No specific data available. Avoid release to the environment.

Section 13: Disposal Considerations

Dispose of in accordance with federal, state, and local environmental regulations. Do not dispose of in sewer or waterways.

Section 14: Transport Information

- **UN Number:** Not regulated for transport
- **Proper Shipping Name:** Not regulated
- **Transport Hazard Class:** None
- **Packing Group:** None

Section 15: Regulatory Information

- This product contains substances subject to reporting under SARA Title III, CERCLA, and state regulations.

Section 16: Other Information



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Prepared by: Inweld Corporation