Inweld
Welding Alloys & Supplies

Safety Data Sheet

1. Identification

Product Names:

8018-B2, 9018-B3, 8018-C1, 8018-C3, 10018-D2, 9018M, 11018M, 12018M, 7010P1, 8018 P1

Manufacturer:

Inweld Corporation

3962 Portland St, Coplay, PA 18037, UNITED STATES

Manufacturer Phone Number: (800) 346-5368

Emergency phone: (800) 424 9300

Recommended Use: Welding electrodes/filler metals for arc welding

Restrictions on Use: Not intended for any other use

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2. Hazard(s) Identification

Classification (per HCS 29 CFR 1910.1200 & GHS):

- **Acute Toxicity – Inhalation (Dust/Fume)**: Category 4
- **Carcinogenicity**: Category 1A
- **Serious Eye Damage/Irritation**: Category 2A
- **Specific Target Organ Toxicity – Single Exposure (Respiratory)**: Category 3
- **Specific Target Organ Toxicity – Repeated Exposure (Respiratory)**: Category 2
- **Reproductive Toxicity**: Category 2
- **Acute Aquatic Toxicity**: Category 3
- **Chronic Aquatic Toxicity**: Category 3

Signal Word: **DANGER**

Hazard Statements:

- H332: Harmful if inhaled

- H350: May cause cancer
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation
- H373: May cause damage to respiratory system through prolonged or repeated inhalation
- H361: Suspected of damaging fertility or the unborn child
- H412: Harmful to aquatic life with long lasting effects

GHS Pictograms:

Precautionary Statements

- **P201** Obtain special instructions before use.
- **P260** Do not breathe dust/fume.
- **P264** Wash hands and exposed skin thoroughly after handling.
- **P270** Do not eat, drink, or smoke when using this product.
- **P271** Use only outdoors or in a well-ventilated area.
- **P280** Wear protective gloves/eye protection/ face protection/respiratory protection.
- **P308+P311** IF exposed or concerned: Call a POISON CENTER or doctor.
- **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
- **P314** Get medical advice/attention if you feel unwell.
- **P403+P233** Store in a well-ventilated place. Keep container tightly closed.
- **P501** Dispose of contents/container in accordance with local/regional regulations.

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3. Composition / Information on Ingredients

Component	CAS #	Concentration (wt %)
Iron (Fe) and iron oxide	7439-89-6	~ balance
Decaborane	17702-41-9	< 0.5 % (8018 series)
Chromium oxide	1308-38-9	2–10 %
Nickel compounds	7440-02-0	0.1–1 %
Molybdenum compounds	7439-98-7	0.5–5 %
Copper compounds (if present)	7440-50-8	≤ 0.3 %
Potential impurities: manganese, silicon, aluminum, titanium, yttrium, fluoride	various	trace amounts

4. First-Aid Measures

Inhalation: Move to fresh air. Seek medical attention if irritation persists.
Skin Contact: Wash with soap & water. Wash clothing before reuse. If rash occurs → medical attention.
Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses if present. See a physician if irritation continues.
Ingestion: Rinse mouth. Do not induce vomiting. Get medical help immediately.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Dry chemical, CO_2, foam, or water spray.
Unsuitable Media: None known.
Special Hazards: Generates metal oxide fume on burning.
Protective Equipment: Self-contained respiratory protection and protective clothing.

6. Accidental Release Measures

Personal Precautions: Avoid inhalation of dust/fumes. Use respirator and gloves.
Environmental Precautions: Prevent release to watercourses.
Containment: Sweep up, avoid dust generation; place in WASTE containers.
Disposal: Follow federal, state, local regulations.

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7. Handling and Storage

Handling:

- Use only in well-ventilated area or with local exhaust.
- Wear respiratory, eye, hand protection.
- Do not inhale fumes or dust.

Storage:
Store in cool, dry place. Keep container tightly closed. Rotate stock to use oldest material first.

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8. Exposure Controls / Personal Protection

Component	OSHA PEL	ACGIH TLV
Fume (as Fe oxide)	5 mg/m^3 (resp.)	5 mg/m^3 (resp.)
Decaborane	0.05 ppm TWA	0.05 ppm STEL
Chromium, nickel	see OSHA tables	see ACGIH TLVs

Protection Measures

- Respiratory: NIOSH-approved respirator for welding fumes.
- Eyes: Safety goggles or face shield.
- Skin: Protective gloves and clothing to prevent contact.

Engineering Controls: Use local exhaust ventilation to keep exposures below limits.

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9. Physical and Chemical Properties

- **Appearance**: Solid electrode with flux coating

- **Odor**: Slight metallic or flux-specific
- **Melting Point**: ~ 1150–1250 °C (varies by alloy)
- **Boiling Point**: Not typical
- **Solubility**: Insoluble in water
- **Auto-ignition**: Not applicable

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10. Stability and Reactivity

Reactivity: Stable under normal conditions. Welding may produce oxide fumes.
Conditions to Avoid: Excessive moisture, incompatible materials.
Incompatible Materials: Strong acids and bases, fluorine, oxidizers.
Hazardous Decomposition: Metal oxide and fluoride fumes during welding.

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11. Toxicological Information

- **Inhalation**: Can irritate respiratory tract; prolonged exposure may cause lung damage.
- **Carcinogenicity**: Chromium (VI), nickel, and other metal compounds may be carcinogenic.
- **Reproductive Toxicity**: Components suspected to affect fertility or fetus.
- **Eye Irritation**: Flux dust or fume may cause serious eye irritation.
- **Chronic Effects**: Prolonged inhalation may result in lung disease.

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12. Ecological Information

- **Fate**: Insoluble metals may accumulate in sediment.
- **Toxicity**: Harmful to aquatic life with long-lasting effects (H412).

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13. Disposal Considerations

Dispose of in accordance with all applicable regulations. Not to be disposed of in drains.

14. Transport Information

UN Number: Not regulated as hazardous for transport.
DOT Classification: Not regulated.

15. Regulatory Information

Regulation	Status/Notes
OSHA HCS (29 CFR 1910.1200)	This SDS is compliant with HCS requirements
CERCLA/SARA	Contains components subject to reporting
TSCA	All ingredients listed or exempt
California Prop 65	Contains chemicals known to cause cancer

16. Other Information

- **Prepared**: July 1, 2025
- **Revision**: 01
- **Disclaimer**: Provided in good faith; users must verify suitability for their specific processes.