

Safety Data Sheet

Section 1: Identification

Product Identifier:

Broco Prime Cut 1418UW, 31618PC, 3836PC, 1248PC

Other Means of Identification:

Filler Metal, Welding Rod, Arc Welding Electrode

Recommended Use:

Welding applications

Manufacturer:

Inweld Corporation

3962 Portland St, Coplay, PA 18037, UNITED STATES

Phone: (800) 346-5368

Emergency Phone Number (CHEMTREC):

(800) 424-9300

Section 2: Hazard(s) Identification

Classification (29 CFR 1910.1200):

- **Carcinogenicity** – Category 1B
- **Specific Target Organ Toxicity (Repeated Exposure)** – Category 1
- **Acute Toxicity (Inhalation, Dust/Fume)** – Category 4
- **Reproductive Toxicity** – Category 2
- **Skin Irritation** – Category 2
- **Eye Irritation** – Category 2A

Signal Word:

DANGER

Hazard Statements:

- May cause cancer.

- Causes damage to organs through prolonged or repeated exposure.
- Harmful if inhaled.
- Suspected of damaging fertility or the unborn child.
- Causes skin irritation.
- Causes serious eye irritation.

Pictograms:



Precautionary Statements:

- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Use only outdoors or in a well-ventilated area.
- Obtain special instructions before use.
- If exposed or concerned: Get medical advice/attention.
- Store locked up.
- Dispose of contents/container in accordance with local regulations.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Weight %
Iron (Fe)	7439-89-6	40–60%
Chromium (Cr)	7440-47-3	10–20%
Nickel (Ni)	7440-02-0	10–20%
Manganese (Mn)	7439-96-5	1–10%
Silicon Dioxide (SiO ₂)	7631-86-9	1–5%

Chemical Name	CAS Number	Weight %
---------------	------------	----------

Titanium Dioxide (TiO ₂)	13463-67-7	<1%
--------------------------------------	------------	-----

Note: All concentrations are in percent by weight unless otherwise stated.

Section 4: First-Aid Measures

Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration. Seek medical attention.

Skin Contact:

Wash thoroughly with soap and water. If irritation persists, seek medical advice.

Eye Contact:

Flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Ingestion:

Not a normal route of exposure. Seek medical advice if symptoms develop.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Use extinguishing media appropriate for surrounding fire (dry chemical, CO₂, foam, or water spray).

Hazardous Combustion Products:

Metal fumes, oxides of iron, manganese, chromium, nickel.

Protective Equipment:

Wear self-contained breathing apparatus and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions:

Avoid inhalation of dust or fumes. Use appropriate PPE.

Environmental Precautions:

Avoid release to the environment. Report releases as required by local, state, and federal authorities.

Methods for Cleanup:

Collect mechanically and place in appropriate container for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling:

Avoid breathing dust/fumes. Use with adequate ventilation. Do not eat, drink or smoke while handling.

Conditions for Safe Storage:

Store in dry, well-ventilated area away from incompatible materials.

Section 8: Exposure Controls/Personal Protection

Substance OSHA PEL (mg/m³) ACGIH TLV (mg/m³)

Iron Oxide	10 (fume)	5 (respirable fraction)
Chromium	1	0.5
Nickel	1	1.5
Manganese	5 (ceiling)	0.02 (inhalable)

Engineering Controls:

Provide local exhaust and general ventilation to maintain exposure below limits.

Personal Protective Equipment:

- **Respiratory Protection:** Use NIOSH-approved respirators.
- **Skin Protection:** Gloves and protective clothing.
- **Eye Protection:** Safety goggles or face shield.
- **Other Protection:** Welding helmet, flame-resistant clothing.

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Metallic rods
Odor	Odorless
Odor threshold	Not applicable
pH	Not applicable
Melting point	~1400–1450°C
Boiling point	Not applicable
Flash point	Not flammable
Solubility in water	Insoluble
Vapor pressure	Not applicable
Specific gravity	~7.8

Section 10: Stability and Reactivity

Reactivity: Not reactive under normal conditions.

Chemical Stability: Stable under recommended storage conditions.

Incompatible Materials: Strong acids, strong oxidizers.

Hazardous Decomposition Products: Metal oxide fumes when welding.

Section 11: Toxicological Information

Likely Routes of Exposure: Inhalation, skin and eye contact.

Acute Effects: Eye/skin irritation, respiratory tract irritation.

Chronic Effects:

- **Nickel & Chromium Compounds:** Carcinogenic.
- **Manganese:** Neurotoxic with prolonged exposure.

Carcinogenicity:

- IARC: Nickel (Group 1), Chromium (Group 1)
- NTP: Known human carcinogens

Section 12: Ecological Information

Environmental Impact:

Avoid release to the environment. Toxic to aquatic life with long-lasting effects.

Section 13: Disposal Considerations

Dispose of in accordance with federal, state, and local regulations. Do not dump into waterways.

Section 14: Transport Information

DOT Classification: Not regulated for transport.

Section 15: Regulatory Information

- **SARA 313:** Contains manganese, nickel, chromium (reportable)
- **TSCA:** All components are listed
- **California Proposition 65:** Contains chemicals known to cause cancer or reproductive toxicity

Section 16: Other Information

Date Prepared: July 1, 2025

Version: 1.0

Prepared by: Inweld Corporation Safety Department

Disclaimer:

This SDS is provided in good faith and is believed to be accurate. Inweld Corporation makes no warranty, expressed or implied, regarding the accuracy or completeness of the data.