

Safety Data Sheet

Section 1: Identification

Product Identifier:

409CB

Other Means of Identification:

ER409Cb, E409Cb (depending on welding process)

Recommended Use:

Welding filler metal for stainless and low-alloy steels

Restrictions on Use:

For industrial and professional welding applications only

Manufacturer:

Inweld Corporation
3962 Portland St
Coplay, PA 18037
UNITED STATES

Company Phone Number:

(800) 346-5368

Emergency Phone Number:

(800) 424-9300 (CHEMTREC – 24 hours)

Section 2: Hazard(s) Identification

Classification of the Substance or Mixture (GHS):

- Carcinogenicity – Category 1A
- Specific Target Organ Toxicity (Repeated Exposure) – Category 1
- Acute Toxicity (Inhalation) – Category 4
- Skin Sensitization – Category 1

Signal Word:

DANGER

Hazard Statements:

- May cause cancer by inhalation
- Causes damage to organs (lungs) through prolonged or repeated exposure
- Harmful if inhaled
- May cause an allergic skin reaction

GHS Hazard Pictograms:**Precautionary Statements:**

- Do not breathe welding fumes or dust
- Use only with adequate ventilation or local exhaust
- Wear protective gloves, clothing, eye, and respiratory protection
- Obtain special instructions before use

Section 3: Composition/Information on Ingredients

Wire Classification: ER409Cb (GTAW / GMAW / FCAW)

Component	CAS No.	Weight %
Iron (Fe)	7439-89-6	Balance
Chromium (Cr)	7440-47-3	10.5 – 12.0
Niobium (Columbium) (Nb)	7440-03-1	0.30 – 0.60
Manganese (Mn)	7439-96-5	≤ 1.0
Silicon (Si)	7440-21-3	≤ 1.0
Carbon (C)	7440-44-0	≤ 0.03

Component	CAS No.	Weight %
Nickel (Ni)	7440-02-0	≤ 0.5

Wire Classification: E409Cb (SMAW – Coated Electrode)

Component	CAS No.	Weight %
Iron (Fe)	7439-89-6	Balance
Chromium (Cr)	7440-47-3	10.5 – 12.0
Niobium (Columbium) (Nb)	7440-03-1	0.30 – 0.60
Manganese (Mn)	7439-96-5	≤ 1.2
Silicon (Si)	7440-21-3	≤ 1.2
Titanium Compounds (flux) Mixture		< 2.0
Fluorides (flux coating) Mixture		< 5.0

Note: Exposure limits apply to **welding fumes**, not the solid product.

Section 4: First-Aid Measures

Inhalation:

Move person to fresh air. If breathing is difficult, administer oxygen and seek medical attention.

Skin Contact:

Wash with soap and water. Seek medical attention if rash or irritation develops.

Eye Contact:

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

Ingestion:

Not a likely route of exposure. Seek medical advice if swallowed.

Most Important Symptoms:

Metal fume fever, respiratory irritation, lung damage with chronic exposure.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:

Non-combustible. Use extinguishing media appropriate for surrounding fire.

Specific Hazards:

Welding fumes may contain toxic metal oxides.

Protective Equipment:

Self-contained breathing apparatus.

Section 6: Accidental Release Measures

Solid wire presents no spill hazard.

Avoid generating airborne dust or fumes. Use appropriate ventilation.

Section 7: Handling and Storage

- Use only with adequate ventilation
- Avoid breathing fumes
- Store in dry conditions
- Keep away from acids and moisture

Section 8: Exposure Controls/Personal Protection

OSHA PELs (Selected):

- Chromium (metal): 1 mg/m³
- Nickel (metal): 1 mg/m³
- Manganese fume: 5 mg/m³ (Ceiling)

Engineering Controls:

Local exhaust ventilation recommended

Personal Protective Equipment:

- Respiratory protection (NIOSH-approved)

- Welding helmet with proper filter lens
- Protective gloves and clothing

Section 9: Physical and Chemical Properties

- Appearance: Metallic solid wire or electrode
- Odor: Odorless
- Melting Point: ~1400–1450°C
- Solubility: Insoluble in water

Section 10: Stability and Reactivity

- Stable under normal conditions
- No hazardous polymerization
- Reacts with strong acids

Section 11: Toxicological Information

- Welding fumes may cause metal fume fever
- Chronic inhalation may cause lung damage
- Chromium compounds may increase cancer risk

Section 12: Ecological Information

Not expected to be toxic to aquatic life in solid form.

Section 13: Disposal Considerations

Dispose of unused material and waste in accordance with local, state, and federal regulations.

Section 14: Transport Information

Not regulated as a hazardous material for transport.

Section 15: Regulatory Information

- OSHA Hazard Communication Standard: Hazardous
- California Prop 65: Contains substances known to cause cancer

Section 16: Other Information

Prepared by:

Inweld Corporation

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2026

Disclaimer:

This SDS is provided for information and safety guidance only and is believed to be accurate as of the date issued.