

Safety Data Sheet

SECTION 1 — IDENTIFICATION

Product Name: Nickel Alloy Welding Filler Metals

Product Types / Classifications:

C-276, HASC-22, HAS-X, HAS-W, NA-60, NA-61, NA-62, NA-65, NA-67, NA-82, NA-190, NA-617, NA-625, NA-718, Ni-55, Ni-99

Recommended Use:

Welding filler metals for GTAW, GMAW, SMAW, SAW, and related welding processes.

Manufacturer:

Inweld Corporation
3962 Portland St
Coplay, PA 18037
United States

Phone: (800) 346-5368

Emergency Phone:

(800) 424-9300

SECTION 2 — HAZARD(S) IDENTIFICATION

Signal Word: DANGER

GHS Classification

When welding, fumes and gases generated from these products may include hazardous metal oxides.

Hazard Classes

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

- Eye Irritation – Category 2
-

GHS Hazard Pictograms



Hazard Statements

- May cause cancer.
 - Causes damage to lungs and respiratory system through prolonged or repeated exposure (inhalation of welding fumes).
 - May cause allergic skin reaction.
 - Harmful if inhaled.
 - Causes eye irritation.
-

Precautionary Statements

Prevention

- Avoid breathing welding fumes or gases.
- Use adequate ventilation and local exhaust at arc.
- Wear respiratory protection when ventilation is inadequate.
- Wear protective gloves, clothing, and eye protection.

Response

- If inhaled: Move person to fresh air.
- If skin irritation occurs: Wash with soap and water and seek medical advice.
- If eye irritation persists: Get medical attention.

Storage

- Store in dry conditions.

Disposal

- Dispose in accordance with local, regional, and national regulations.

SECTION 3 — COMPOSITION / INFORMATION ON INGREDIENTS

The following compositions represent **typical ranges (%) for deposited metal or wire composition**.

C-276 (ERNiCrMo-4)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	14 – 16
Molybdenum	7439-98-7	15 – 17
Iron	7439-89-6	4 – 7
Tungsten	7440-33-7	3 – 4.5
Manganese	7439-96-5	≤1

HASC-22 (ERNiCrMo-10)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	20 – 22
Molybdenum	7439-98-7	12 – 14
Iron	7439-89-6	≤3
Tungsten	7440-33-7	2 – 4

HAS-X (ERNiCrMo-2)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	20 – 23
Iron	7439-89-6	17 – 20
Molybdenum	7439-98-7	8 – 10
Cobalt	7440-48-4	≤2.5

HAS-W

Component	CAS	%
Nickel	7440-02-0	Balance
Molybdenum	7439-98-7	23 – 26
Iron	7439-89-6	≤5
Chromium	7440-47-3	≤1

NA-60 (ERNiCu-7)

Component	CAS	%
Nickel	7440-02-0	62 – 69
Copper	7440-50-8	Balance
Titanium	7440-32-6	1.5 – 3
Iron	7439-89-6	≤2.5
Manganese	7439-96-5	≤4

NA-61 (ERNi-1)

Component	CAS	%
Nickel	7440-02-0	≥93
Titanium	7440-32-6	2 – 3.5
Iron	7439-89-6	≤1
Manganese	7439-96-5	≤1

NA-62 (ERNiCrMo-3)

Component	CAS	%
Nickel	7440-02-0	≥55
Chromium	7440-47-3	20 – 23
Molybdenum	7439-98-7	8 – 10
Niobium + Tantalum	7440-03-1	3 – 4
Iron	7439-89-6	≤5

NA-65

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	28 – 31
Iron	7439-89-6	8 – 12
Molybdenum	7439-98-7	≤1

NA-67

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	20 – 23
Iron	7439-89-6	≤10
Niobium	7440-03-1	3 – 5

NA-82 (ERNiCr-3)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	18 – 22
Iron	7439-89-6	≤3
Manganese	7439-96-5	≤3

NA-190

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	15 – 20
Iron	7439-89-6	7 – 10
Molybdenum	7439-98-7	≤3

NA-617 (ERNiCrCoMo-1)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	20 – 24
Cobalt	7440-48-4	10 – 15
Molybdenum	7439-98-7	8 – 10

NA-625 (ERNiCrMo-3)

Component	CAS	%
Nickel	7440-02-0	Balance
Chromium	7440-47-3	20 – 23
Molybdenum	7439-98-7	8 – 10
Niobium	7440-03-1	3 – 4
Iron	7439-89-6	≤5

NA-718 (ERNiFeCr-2)

Component	CAS	%
Nickel	7440-02-0	50 – 55
Chromium	7440-47-3	17 – 21
Iron	7439-89-6	Balance
Niobium	7440-03-1	4.5 – 5.5

Ni-55 (ENiFe-CI)

Component	CAS	%
Nickel	7440-02-0	50 – 60
Iron	7439-89-6	Balance
Manganese	7439-96-5	≤1

Ni-99 (ENi-CI)

Component	CAS	%
Nickel	7440-02-0	≥99

SECTION 4 — FIRST-AID MEASURES

Inhalation

- Move affected person to fresh air.
- Seek medical attention if symptoms persist.

Skin Contact

- Wash with soap and water.

Eye Contact

- Flush with water for at least 15 minutes.

Ingestion

- Not expected during normal industrial use.
-

SECTION 5 — FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

- Dry chemical
- CO₂

- Foam

Hazards

Welding fumes may contain metal oxides including:

- Nickel oxide
 - Chromium oxide
 - Molybdenum oxide
-

SECTION 6 — ACCIDENTAL RELEASE MEASURES

- Avoid dust generation.
 - Sweep or collect mechanically.
 - Use appropriate PPE.
-

SECTION 7 — HANDLING AND STORAGE

Handling

- Avoid inhalation of welding fumes.
- Ensure proper ventilation.

Storage

- Store in dry location.
 - Keep packaging sealed.
-

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

- Local exhaust ventilation
- Welding fume extraction

Personal Protective Equipment

- Welding helmet with proper shade

- Flame-resistant clothing
 - Gloves
 - Respirator if ventilation inadequate
-

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid metal wire or rod

Color: Metallic silver

Odor: Odorless

Melting Point: ~1200–1400°C (varies by alloy)

Density: 7.8 – 8.9 g/cm³

Solubility: Insoluble in water

SECTION 10 — STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid

- Welding arc without ventilation

Hazardous Decomposition

Metal oxide fumes.

SECTION 11 — TOXICOLOGICAL INFORMATION

Exposure to welding fumes may cause:

- Metal fume fever
 - Respiratory irritation
 - Long-term lung damage
 - Increased cancer risk from hexavalent chromium or nickel compounds.
-

SECTION 12 — ECOLOGICAL INFORMATION

Metallic components may persist in the environment.

SECTION 13 — DISPOSAL CONSIDERATIONS

Dispose according to federal, state, and local regulations.

SECTION 14 — TRANSPORT INFORMATION

Not regulated as hazardous for transport.

SECTION 15 — REGULATORY INFORMATION

Complies with:

- OSHA Hazard Communication Standard 29 CFR 1910.1200
 - GHS Classification
 - SARA Title III
-

SECTION 16 — OTHER INFORMATION

Prepared for:

Inweld Corporation

Revision Date: March 10, 2026