Inweld
Welding Alloys and Supplies

Safety Data Sheet

Section 1: Identification

Product Identifier:
Hi-Alloy Am354

Recommended Use:
Welding filler metal

Restrictions on Use:
Use only as directed. For industrial use only.

Manufacturer:
Inweld Corporation
3962 Portland St
Coplay, PA 18037
United States

Phone Number (General): (800) 346-5368
Emergency Phone Number (CHEMTREC): (800) 424-9300

Section 2: Hazard(s) Identification

Classification:

- Acute toxicity – Inhalation (Category 4)
- Carcinogenicity (Category 1A)
- Specific target organ toxicity – Repeated exposure (Category 2)
- Skin irritation (Category 2)
- Eye irritation (Category 2A)

Signal Word:
DANGER

Hazard Statements:

- H315: Causes skin irritation

- H319: Causes serious eye irritation
- H332: Harmful if inhaled
- H350: May cause cancer (inhalation)
- H373: May cause damage to organs through prolonged or repeated exposure (lungs, central nervous system)

Pictograms:

Precautionary Statements:

- P201: Obtain special instructions before use
- P202: Do not handle until all safety precautions have been read and understood
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray
- P264: Wash skin thoroughly after handling
- P280: Wear protective gloves/protective clothing/eye protection/face protection
- P302 + P352: IF ON SKIN: Wash with plenty of water
- P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
- P308 + P313: IF exposed or concerned: Get medical advice/attention
- P337 + P313: If eye irritation persists: Get medical advice/attention
- P405: Store locked up
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	% by Weight	Classification
Iron (Fe)	7439-89-6	40–60%	Not classified

Chemical Name	CAS Number	% by Weight	Classification
Chromium (Cr)	7440-47-3	15–25%	Carcinogenicity (1A)
Nickel (Ni)	7440-02-0	10–20%	Carcinogenicity (1A)
Molybdenum (Mo)	7439-98-7	2–5%	Not classified
Silicon (Si)	7440-21-3	1–3%	Not classified
Manganese (Mn)	7439-96-5	1–3%	STOT RE (2)

Note: Exact percentages are withheld as trade secret.

Section 4: First-Aid Measures

Inhalation:
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.

Skin Contact:
Wash with soap and water. Remove contaminated clothing and wash before reuse. Seek medical advice if irritation develops.

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

Ingestion:
Not a typical route of exposure. Seek medical attention if symptoms occur.

Section 5: Fire-Fighting Measures

Extinguishing Media:
Use appropriate media for surrounding fire. Welding consumables themselves do not burn.

Special Hazards:
Fumes and gases from welding may contain toxic and/or irritating compounds. May produce hazardous metal oxide fumes.

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

Section 6: Accidental Release Measures

Personal Precautions:
Avoid contact with skin and eyes. Avoid inhalation of dust/fumes. Wear appropriate PPE.

Environmental Precautions:
Prevent entry into sewers or waterways.

Cleanup Methods:
Pick up solid material and place in appropriate containers for disposal.

Section 7: Handling and Storage

Handling:
Use adequate ventilation. Avoid contact with skin and eyes. Do not breathe dust, fumes, or gases.

Storage:
Store in a cool, dry place away from incompatible materials. Keep container tightly closed when not in use.

Section 8: Exposure Controls/Personal Protection

Component	OSHA PEL	ACGIH TLV
Chromium	1 mg/m^3	0.5 mg/m^3
Nickel	1 mg/m^3	1.5 mg/m^3
Manganese	5 mg/m^3 (ceiling)	0.02 mg/m^3 (resp.)
Iron	10 mg/m^3 (fume)	5 mg/m^3 (fume)

Engineering Controls:
Use local exhaust ventilation to control exposure.

PPE:

- **Eye Protection:** Safety glasses or face shield
- **Skin Protection:** Protective gloves and clothing
- **Respiratory Protection:** Use approved respirator if ventilation is inadequate

Section 9: Physical and Chemical Properties

- **Appearance:** Metallic wire or rod
- **Odor:** Odorless
- **Odor Threshold:** Not applicable
- **pH:** Not applicable
- **Melting Point:** ~1350°C
- **Boiling Point:** Not determined
- **Flash Point:** Not applicable
- **Flammability:** Not flammable
- **Vapor Pressure:** Not applicable
- **Solubility:** Insoluble in water
- **Density:** ~7.9 g/cm^3

Section 10: Stability and Reactivity

Reactivity:
Not reactive under normal conditions.

Chemical Stability:
Stable under recommended storage conditions.

Hazardous Reactions:
None known.

Incompatible Materials:
Strong acids, strong oxidizers.

Hazardous Decomposition Products:
Metal oxides, chromium compounds, nickel compounds.

Section 11: Toxicological Information

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

Acute Effects:

- Irritating to eyes and skin
- Harmful if inhaled

Chronic Effects:

- Prolonged inhalation of welding fumes may lead to lung damage
- Contains known carcinogens (Cr, Ni)

Carcinogenicity:

- Nickel and Chromium are classified as Group 1 carcinogens (IARC)

Section 12: Ecological Information

No data available. Avoid release to the environment. Components are not readily biodegradable.

Section 13: Disposal Considerations

Dispose of contents/container in accordance with local, state, and federal regulations. Do not dispose into the environment.

Section 14: Transport Information

Not regulated as hazardous under DOT/IMDG/IATA.

Section 15: Regulatory Information

- OSHA: Hazardous

- TSCA: All components listed
- SARA 313: Chromium, Nickel, Manganese
- California Prop 65: Contains substances known to the State of California to cause cancer

Section 16: Other Information

Prepared By: Inweld Corporation

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Disclaimer: The information provided in this Safety Data Sheet is believed to be accurate and represents the best information currently available. However, Inweld Corporation makes no warranty, expressed or implied, regarding its accuracy.