



MATERIAL SAFETY DATA SHEET

HEMALLOY CO. INC.

P.O. BOX 350

BRYN MAWR, PA 19010-0350

Telephone: (610) 527-3700

Fax No.: (610) 527-3878

CHEMICAL NAME: Ferro Nickel Magnesium Alloy

COMMON/TRADE NAME: Fenimag Alloy

DATE: February 10, 2014

SUPERSEDES: October 1, 2012

SECTION I — HAZARDOUS INGREDIENTS

Hazardous Components (Specific Chemical Identity)	CAS #	OSHA PEL	ACGIH TLV
Nickel*	7440-02-0	1mg/M ³ TWA	1.5mg/M ³ TWA (Inhalable Particles)
Magnesium	7439-95-4	15mg/M ³ TWA (Total Dust)	10mg/M ³ TWA (Inhalable Particles)
Iron	7439-89-6	15mg/M ³ TWA (Total Dust)	10mg/M ³ TWA (Inhalable Particles)

*Contains 60% to 65% Nickel, a toxic chemical subject to the reporting requirements of Section 313 of Title III of SARA and CFR Part 372.

SECTION II — PHYSICAL/CHEMICAL CHARACTERISTICS

Melting Point	Approx. 2500° F	Specific Gravity (H ₂ O = 1)	6.5 to 6.8
Density	(Water) Nil	Other	
Appearance and Odor	silvery metallic appearance. No odor.		

SECTION III — REACTIVITY DATA

Stability:	Unstable	Conditions to Avoid
	Stable <input checked="" type="checkbox"/>	
Incompatibility (Materials to Avoid)	Acids.	
Hazardous Decomposition or Byproducts	None known.	
Hazardous Polymerization:	May Occur	Conditions to Avoid
	Will Not Occur <input checked="" type="checkbox"/>	

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	None.
Extinguishing Media]
]
]
Special Fire Fighting Procedures] Not a fire or explosion hazard in normal conditions; however, when used as a casting addition some of the Magnesium may form a vapor above the bath and when mixed with air at high casting temperature may present an explosion hazard.
]
Unusual Fire and Explosion Hazards]
]
]

SECTION V — HEALTH HAZARD DATA

Route(s) of Entry Inhalation. External exposure; skin contact.

Health Hazards (*Acute and Chronic*) May cause irritation of the respiratory system. Also may cause "Nickel Itch", a form of dermatitis.

Carcinogenicity The National Toxicology Program annual report of 1991 lists Nickel as a confirmed human carcinogen of the nasal cavity, sinus and lungs. ACGIH does not classify Nickel metal as a human carcinogen.

Signs and Symptoms of Overexposure Irritation of the respiratory system; skin itch.

Emergency and First Aid Procedures On contact with skin, wash with soap and water. On contact with eyes, flush eyes thoroughly with water for 15 minutes. On inhalation of excessive dust, move to fresh air. Seek medical attention if problems persist.

SECTION VI — SPECIAL PROTECTION AND PRECAUTIONS

Ventilation and Engineering Controls Appropriate ventilation.

Personal Protective Equipment NIOSH-certified respirator, gloves and ANSI-approved eye protection.

Safe Handling, Use and Storage Normal handling and storage.

Protective Measures During Repair & Maintenance Use protective equipment listed above.

Other

SECTION VII — SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material is Released or Spilled Use normal clean-up procedures.

Waste Disposal Method Follow federal, state and local regulations.

Other Precautions Follow all other precautions and data noted herein.

NOTE: The data contained in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information herein is based on technical data that Chemalloy believes to be reliable. It is intended to be used by persons with technical skill. Prior to use, users shall conduct their own investigation(s) to determine the suitability of the information for their particular purpose, and appropriate warnings and safe handling procedures should be provided to handlers and users. Any use of this data must be determined by the user to be in accordance with federal, state and local laws and regulations. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents. Since conditions of use and suitability are beyond Chemalloy's control, any risks of use and suitability are therefore assumed by the user, and Chemalloy expressly disclaims all warranties, including warranties of merchantability and fitness for a particular purpose, express or implied, in respect to the use or suitability of the material.