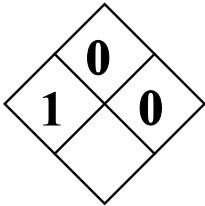


MATERIAL SAFETY DATA SHEET

FERROMOLYBDENUM

Transportation Emergencies (U.S.): (800) 424-9300 (CHEMTREC)
Transportation Emergencies (Canada): (613) 996-6666 (Collect)(CANUTEC)

Section 1. Hazardous Ingredients	LD ₅₀	%	CAS No.
Iron, elemental	20 mg/kg	26 – 32	7439-89-6
Molybdenum, elemental		68 – 74	7439-98-7
Section 2. Preparation Information			
Responsibility for MSDS Preparation: Masterloy Products Company (613) 822-1010			
Prepared November 15, 1989 Reviewed and Revised December 11, 2013 Supersedes Jun. 23, 2011			
Section 3. Product Information			
Product Name: Ferromolybdenum		CAS No. 11121-95-2	Product Use: Alloying of iron and steel
Manufacturer/Supplier: Masterloy Products Company 5663 Doncaster Road Ottawa, ON K1G 3N4, Canada Phone (613) 822-1010 (8:00 a.m. – 5:00 p.m. Mon. – Fri. EST) FAX (613) 822-0249			
Section 4. Physical Data			
Boiling Point:	Not applicable	Specific Gravity (H₂O=1):	9.5
Melting Point:	Approximately 3,000 °F	Vapor Pressure:	Not applicable
pH:	Not applicable	Vapor Density:	Not applicable
Odor Threshold:	Not applicable	Evaporation Rate:	Not applicable
Odor and appearance: Silvery white metallic solid, lumps to powder.			
Coefficient of Water/Oil Distribution: Not applicable.			
Section 5. Fire and Explosion Hazard Data			
Flash Point: Not applicable		Flammable Limits: Not applicable	
Lower Explosive Limit: Not applicable		Upper Explosive Limit: Not applicable	
Autoignition Temperature: Not applicable		Extinguishing Media: Not applicable	
Conditions of Flammability: Not applicable			
Hazardous Combustion Products: Not applicable			
Explosion Data – Sensitivity to Impact: Not applicable			
Explosion Data – Sensitivity to Static Discharge: Not applicable			
 NFPA Code			
Section 6. Reactivity Data			
Conditions Under Which Product is Chemically Unstable: None known.			
Substance or Class of Substances With Which Product is Incompatible: Strong acids, oxidizers.			
Conditions of Reactivity: None known.			
Hazardous Decomposition Products: None known.			

The information data and recommendations contained herein are believed to be accurate. Masterloy Products makes no warranty of any kind whatever with respect thereto and disclaims all liability from reliance thereon.

FERROMOLYBDENUM

Section 7. Health Hazard Data/Toxicological Properties

ACGIH TLV:- 10 mg/m³ Total Dust

WHMIS CLASS (Canada): D2

OSHA PEL: 15 mg/m³ Total Dust

Routes of Entry: Lungs (breathing) - Yes Eyes – No Ingestion - No Skin – No

Carcinogen: OSHA - No NTP - No IARC – No ACGIH – No

Effects of Overexposure:

Short Term: High concentrations of dust may cause eye or throat irritation.

Long Term: Long term exposure to dust concentrations higher than recommended exposure limits may cause delayed lung injury.

Sensitization to Product: Not applicable

Toxicologically synergistic products: None known.

Medical Conditions Aggravated: Workers with existing lung problems may be more susceptible to the effects of this material.

Toxicity Data: For iron, rabbit, LD50 20 mg/kg

Teratogenicity: None found

Mutagenicity: Molybdenum, inhalation, rat, 19.5 mg/m³

Reproductive Toxicity: Molybdenum, oral, rat lowest published toxic dose 5.8 mg/kg

Section 8. Preventive Measures

Respiratory Protection: If dust limits exceed recommended exposure limits, use of an approved dust respirator is recommended until feasible engineering controls are completed.

Ventilation: Local exhaust ventilation is recommended to control dust to below applicable exposure limits.

Eye Protection: If high dust concentrations exist wear tight-fitting goggles.

Other Protective Equipment: Optional

Steps To Be Taken In Case Material Is Released Or Spilled: If uncontaminated, sweep up or collect, and reuse as product. If contaminated, collect in a suitable container.

Waste Disposal Method: Can be disposed of in an approved disposal facility, in accordance with applicable federal, state or provincial, and local regulations. The nature and extent of contamination, if any, may require use of specialized disposal methods.

Storage Requirements: Store in a dry area, away from acids and strong oxidizers.

Handling Procedures and Equipment: Optional.

DOT Identification: Not regulated by DOT

Transport Canada: Not regulated

Section 9. First Aid Measures

First Aid: Eyes - Flush thoroughly with running water. See a physician if irritation persists.

Skin - Wash thoroughly with soap and water.

Inhalation - Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

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