



PERFORMANCE MINERALS™

MATERIAL SAFETY DATA SHEET

IDENTITY (as Used on Label and List) Availa-Mn 80	CHEMICAL NAME Manganese amino acid complex
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Section I

Manufacturer's name Zinpro Corporation	Emergency Telephone Number CHEMTREC 800-424-9300
Address (Number, Street, City, State and ZIP Code) 10400 Viking Drive, Suite 240 Eden Prairie, MN 55344-7265	Telephone Number for Information 952-944-2736
	Date Prepared January 2006
	Signature of Preparer (optional)

Section II—Hazardous Ingredients/Identity Information

Hazardous Components (Specific chemical identity, common names, CAS #)	OSHA PEL	ACGIH TLV	wght %	HAP (Y/N)	SARA313 (Y/N)
manganese 7439-96-5	^a 5 mg/m ³	^a 5 mg/m ³	8% (Mn)	^b Y	^c Y

^aPermissible exposure level (PEL) and threshold limit value (TLV) are set for manganese as “dust and compounds.”

^bManganese (7439-96-5) is subject to the reporting requirements of SARA Title III Section 313 (Emergency Planning and Community Right to Know) and of 40 CFR Part 372

^cManganese compounds are listed as Hazardous Air Pollutants in Section 112 of the Clean Air Act Amendments and may be subject to regulation if emitted to the air.

Section III—Physical/Chemical Characteristics

Boiling Point	NA	Specific Gravity (H ₂ O = 1)	0.75
Vapor Pressure (mm Hg)	NA	Melting Point	decomposition >500°F
Vapor Density (AIR = 1)	NA	Evaporation Rate (Butyl Acetate = 1)	NA
Solubility in Water	soluble (carrier is insoluble)		
Appearance and Odor	brown granular, sweet organic odor		

Section IV—Fire and Explosion Hazard Data

Flash Point (Method Used)	non-flammable	Flammable Limits	NA	LEL	NA	UEL	NA
Extinguishing Media	as appropriate for surrounding materials						
Special Fire Fighting Procedures	none						
Unusual Fire and Explosion Hazards	respiratory protection against potential for metal fumes						

Section V—Reactivity Data

Stability	Unstable	X	Conditions to Avoid
	Stable		acids or caustics

Incompatibility (Materials to Avoid) Metal compounds: do not mix with acids or caustics unless under controlled conditions

Hazardous Decomposition or Byproducts None

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI—Health Hazard Data

Route(s) of Entry	Inhalation? Yes	Skin? Yes	Ingestion? Yes
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Health Hazards (*Acute and Chronic*)

May irritate skin, eyes, and mucous membranes. Essential trace minerals in safe concentrations are not health hazards. Excessive ingestion or inhalation of manganese may produce nervous system effects.

Carcinogenicity	NTP? No	IARC Monographs? No	OSHA Regulated? No
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Signs and Symptoms of Exposure

Prolonged contact may irritate (mild pain and redness) skin, eyes, and mucous membranes. Prolonged inhalation may cause irritation of nose, mouth, & throat. Excessive inhalation or ingestion of manganese may lead to drowsiness, muscle weakness, emotional disturbances, or paralysis.

Medical Conditions Generally Aggravated by Exposure

Respiratory problems, existing dermatitis

Emergency and First Aid Procedures

Wash skin and eyes with copious amounts of water. Rinse mouth and throat with water repeatedly without swallowing. Seek medical attention if necessary.

Section VII—Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled

Recover uncontaminated material for reuse. Vacuum or sweep remaining waste, keeping dust to a minimum. Place in covered container for transport.

Waste Disposal Method

Dispose as nonhazardous solid waste at a facility licensed to receive municipal/industrial waste. Cover or contain material during transport.

Precautions to Be Taken in Handling and Storing

Store in dry location. Wear dust mask, goggles, and chemical resistant gloves to avoid inhalation or contact.

Other Precautions

None

Section VII—Control Measures

Respiratory Protection (<i>Specify Type</i>)			
Ventilation	Local Exhaust	X	Special dust mask if prolonged contact
	Mechanical (<i>General</i>)		Other
Protective Gloves	chemical-resistant gloves		Eye Protection goggles
Other Protective Clothing or Equipment	none		

Work/Hygienic Practices

Use of protective gear and good personal hygiene will reduce the possibility of contact irritation. Wash with soap and water after handling.
