

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard.
29 CFR 1910.1200. Standard must be
consulted for specific requirements.



IDENTITY OF SUBSTANCE (As Used on Label and List) Zinpro 4-Plex	<i>Note: Blank spaces are not permitted, if any item is not applicable, or no information is available, the space must be marked to indicate that.</i>
CHEMICAL NAME Zinc Methionine/Copper Lysine/ Manganese Methionine/Cobalt Glucoheptonate	

Section I

Manufacturer's Name Zinpro Corporation	Emergency Telephone Number Chemtrec 800 424-9300
Address (Number, Street, City, State, and ZIP Code) 6500 City West Parkway, Suite 300	Telephone Number for Information 612 944-2736
Eden Prairie, MN 55344	Date Prepared February 1998
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

IS THIS PRODUCT HAZARDOUS IN THIS CONCENTRATION UNDER 29 CFR PART 1910.1200? YES NO

IF YES, CHECK HEALTH HAZARD — CARCINOGEN HIGHLY TOXIC SENSITIZER TARGET ORGAN EFFECT
 CORROSIVE IRRITANT TOXIC

OR, CHECK PHYSICAL HAZARD — COMBUSTIBLE LIQUID COMPRESSED GAS EXPLOSIVE
 FLAMMABLE ORGANIC PEROXIDE OXIDIZER
 PYROPHORIC UNSTABLE (REACTIVE) OR WATER-REACTIVE

Hazardous Components (Specific Chemical Identity: Common Name(s)) OSHA PEL ACGIH TLV Other Limits Recommended % (optional)

This product contains the following chemicals which may be subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372:

Component	CAS #	Percent
Copper Sulfate	7440-50-8	0.88% Cu
Cobalt Chloride	7791-13-1	0.18% Co
Manganese Sulfate	7785-87-7	1.40% Mn
Zinc Sulfate	7733-02-0	3.58% Zn

Section III — Physical/Chemical Characteristics

Boiling Point Not Applicable	Specific Gravity (H ₂ O = 1) 1.79
Vapor Pressure (mm Hg) Not Applicable	Melting Point Decomposes above 500° F
Vapor Density (Air = 1) Not Applicable	Evaporation Rate (Butyl Acetate = 1) Not Applicable
Solubility in Water Soluble	
Appearance and Odor Dark Blue Powder	

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) None	Flammable Limits Not Applicable	LEL N.A.	UEL N.A.
Extinguishing Media Water, foam, CO ₂ , or dry chemical			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazards None			

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid)

Hazardous Decomposition or Byproducts

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	Not Applicable

Section VI — Health Hazard Data *Based on specific concentration as sold*

Route(s) of Entry:	Inhalation? May Cause Irritation	Skin? Contact May Cause Irritation	Ingestion? Unlikely
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Health Hazards (Acute and Chronic)

None

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
None	No	No	No

Signs and Symptoms of Exposure

Prolonged contact with eyes or skin may cause irritation. Prolonged inhalation may cause respiratory irritation.

Medical Conditions

Generally Aggravated by Exposure Respiratory problems.

Emergency and First Aid Procedures

Wash eyes or skin with water. If necessary, seek medical attention.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Recover uncontaminated material for use. Vacuum or sweep remaining material keeping dust to a minimum.

Waste Disposal Method

Dispose of unreclaimable material in RCRA approved waste facility.

Precautions to Be Taken in Handling and Storage

Use face mask to avoid prolonged inhalation. Avoid prolonged skin contact. Store in dry place.

Other Precautions

Section VIII — Control Measures *Specify whether one or more controls are necessary (alone or in combinations)*

Respiratory Protection (Specify Type)

Face Mask

Is respiratory protection necessary unnecessary if ventilation identified below is used? Possibly necessary with prolonged contact.

Ventilation	Local Exhaust X	Special
	Mechanical (General)	Other

Protective Gloves	<input checked="" type="checkbox"/> Yes (Specify type) For prolonged contact. (rubber gloves) <input type="checkbox"/> No	Eye Protection <input checked="" type="checkbox"/> Yes (Specify type) For prolonged (goggles) <input type="checkbox"/> No contact in dusty conditions
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Other Protective Clothing or Equipment	Not Applicable	Hygienic Practices Good personal hygiene reduces possibility of skin irritation.
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Is protective clothing necessary unnecessary if other control measures are used?