Material Safety Data Sheet May be used to comply with OSHA's Hazard Communication Standard 29CFR 1910. Standard must be consulted for specific requirements.

Product: Dyna Gold Manganese 5%

QUICK IDENTIFIER Common Name: Chelated Manganese Nutritional

SECTION 1 -	COMPANY INFORMAT	ION			
Manufacturer's Name:	Chemical Dynamics, Inc.	Emergency Telephone Number:	1-800-424-9300		
Address:	4206 Business Lane	Other Information Call:	1-813-752-4950		
City, State, and Zip	Plant City, Florida 33566	Date Prepared: 5/4/04			
SECTION 2 -	HAZARDOUS INGRED	IENTS/IDENTITY			
Hazardous Component(s) (che Manganese Sulfate	emical & common name(s)	OSHA PEL ACGIH TLV EXPOSURE 5 mg/M3 5 mg/M3	E LIMITS CAS NO. 10034-96-5		
SECTION 3-	PHYSICAL & CHEMIC	AL CHARACTERISTICS			
Boiling Point:	<u>N/A °F</u> Specific Gravity:	1.29 Vapor Pressure:	N/A		
Vapor Pressure:	N/A Reactivity in Water :	Soluble Melting Point:	N/A		
Appearance and Odor:	Dark opaque with a sweet smell				
SECTION 4-	FIRE & EXPLOSION D	ATA			
Flash Point: Flammable Limits in Air: Auto-Ignition Temp:	N/A °F Method Used: N/A LEL Lower: N/A Extinguisher Media:	N/A UEL Upper: Non flammable if involved in fire, can chemical; CO ₂ , water spray or foam.	extinguish with dry		
Special Fire Fighting Procedures:	This product is non-flammable, and does not support combustion. If heated to decomposition sulfur dioxide fumes may be released. Use of SCBA is recommended. Fire run-off water should be contained to prevent environmental contamination.				
Unusual Fire and Explosion Hazards:	If this product is heated to an anhydrous state it will emit sulfur dioxide fumes, which are hazardous if inhaled. Exposure to high heat can emit toxic vapors.				
SECTION 5-	PHYSICAL HAZARDS	(REACTIVITY DATA)			
Stability:	X Stable	Unstable Conditions to Avoid:	Excessive heat		
Incompatibility Materials to Avoid!:	Avoid mixtures containing calcium, which will result in the formation of insoluble Calcium Sulfates. Phosphoric acid could cause the formation of insoluble				
	metal phosphates.				

Page 2-	Dyna Gold Manganese 5%			
SECTION 5-	PHYSICAL HAZARDS (REACTIVITY DATA)Continued			
Hazardous Decomposition Products:		SO2 vapors		
Hazardous Polymerization:		May Occur: 🗌 Will Not Occur: 🔀		
	Conditions to Avoid:	Extreme Heat.		
SECTION 6-	HEALTH HAZARDS			
ACUTE: Mild skin irritant, conjunctivitis, upset stomach and/or gastrointestinal symptoms are				
	temporary.			
CHRONIC:	Prolonged skin contact may result in dermatitis (drying) or eczema (itching)			
CARCINOGEN				
LISTED IN:		NOGRAPH X NOT LISTED		
ROU	TES OF ENTRY AND E	MERGENCY FIRST AID PROCEDURES		
1. Inhalation:	No hazard under norm	al conditions. If necessary move victim to fresh air. If symptoms		
	persist call a physician	. Administer CPR if necessary.		
2. Eyes:	Flush eyes with running water for 15 minutes. If redness persists, seek medical attention.			
3. Skin:	Remove contaminated clothing, wash with clean water and soap. Put on clean clothes.			
		<u> </u>		
4. Ingestion:	Give large amounts of	water. DO NOT INDUCE VOMITING. Call physician immediately.		

SECTION 7- SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken Handling and Storage:	Store in cool ventilated place away from fire hazards, excessive heat, flammable or easily oxidizable materials. Do not allow product to dry out.		
Other Precautions:	Do not allow product to go below 35 degrees. Apply product in open areas. Keep away from		
	children and pets. Do not contaminate feed, seed or any water sources.		
Steps to be taken in			
case of Release or Spill:	Dike area and maximize recovery. Pump into a tank or absorb with diatomaceous earth or		
-	sand. Sweep up and place into containers for land application at recommended rates.		
	Prevent entry into sewers or waterways. Clean up at once; do not allow dry product		
	to come in contact with heat or ignition sources.		
Environmental	¥		
Precautions:	Relatively low toxicity to fish and aquatic organisms. Do not contaminate any waterway, lake,		
	stream or estuary by direct application of cleaning of equipment or disposal. Triple rinse		
	containers and offer for recycling or dispose of in an approved landfill. Consult Federal,		
	state and local regulations for proper disposal.		

Page 3-	Dyna Gold Manganese 5%			
SECTION 8-	CONTROL AND PROTECTIVE MEASURES			
Respiratory Protection:	None required if used in open under normal conditions. Respiratory protection may be required in the event of a spill in an enclosed area. Use SCBA when fighting fires.			
Protective Gloves:	Impervious gloves from rubber, neoprene or nitrile.			
Eye Protection:	Side-shielded safety glasses or chemical splash-proof goggles.			
Other Protective Clothing or equipment:	Eye wash station with safety shower. Use of a chemically resistant apron may be required for some activities.			
Hygienic Work Practice	Bathe and change clothes daily. Wash contaminated clothing separate from other laundry.			

SECTION 9- TRANSPORT AND REGULATORY INFORMATION

MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION					
Proper Shipping Name:	None				
Hazard Class Number:	None				
Description:	None				
UN Identification Number:	None				
Packing Group:	None				
DOT Label(s) Required:	None				
	NFPA CODE: Health = 1	Flammability = 0	Reactivity = 0		
Toxicity:	LD50 for MnSO4 = 50mg/Kg (oral-rat)				
Notes:	This product is not regulated by EPCRA or any of the provisions of SARA Title III.				