



Safety Data Sheet

Issue Date 01-May-2006

Revision Date: 27-Jun-2013

Version 1

1. IDENTIFICATION

Product Identifier

Product Name Chem-Plex Liquid Manganese 8%Mn, 4.8%S

Other means of identification

SDS # CNI-006

Recommended use of the chemical and restrictions on use

Recommended Use Plant Nutrients.

Details of the supplier of the safety data sheet

Supplier Address

CNI AgriMinerals
P.O. Box 3706
Albany, GA 31706

Emergency Telephone Number

Company Phone Number 1-229-883-5538 (Business)

1-229-439-0842 (fax)

Emergency Telephone (24 hr) Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Appearance Dark brown liquid

Physical State Liquid

Odor Earthy odor

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name Lignin Sulfonate Chelate (complex)/Micronutrient(s).

Chemical Name	CAS No	Weight-%
A proprietary blend of Lignosulfonic acid, sodium salt & Micronutrient sulfates in aqueous solution	Proprietary	>99

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.
Inhalation	Remove from exposure, lie down. If symptoms persist, call a physician.
Ingestion	If conscious, give large amounts of milk or water and get medical attention. If prompt medical attention is not available, call your local Poison Control Center.

Most important symptoms and effects

Symptoms	May cause respiratory irritation. May cause skin and eye irritation. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting or diarrhea.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically. Exposure may aggravate pre-existing respiratory or skin problems.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not release runoff from fire control methods to sewers or waterways.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Hazardous Combustion Products Metal oxide/oxides. Oxides of sulfur. Volatile organic compounds.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protection recommended in Section 8.
For Emergency Responders	Follow applicable OSHA regulations (29 CFR 1910.120).

Environmental Precautions Prevent runoff to sewers, streams, and other bodies of water. See Section 12 for additional Ecological Information. See Section 13, Disposal Considerations, for additional information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. For large spills, dike far ahead of spill for later disposal.

Methods for Clean-Up For small spills, absorb with sand, clay, or other inert absorbent. For large spills contained material may be salvaged for use if uncontaminated.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Use in accordance with product label instructions.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store in compatible containers. Keep away from children, pets, domestic animals, and wildlife.

Packaging Materials Empty containers should be triple rinsed and use the rinsate in product tank. See Section 13, Disposal Considerations, for additional information.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proprietary	TWA: 0.2 mg/m ³ TWA: 0.2 mg/m ³ Mn	(vacated) TWA: 1 mg/m ³ fume (vacated) STEL: 3 mg/m ³ fume (vacated) Ceiling: 5 mg/m ³ Ceiling: 5 mg/m ³ fume Ceiling: 5 mg/m ³ Mn	IDLH: 500 mg/m ³ IDLH: 500 mg/m ³ Mn TWA: 1 mg/m ³ fume TWA: 1 mg/m ³ Mn STEL: 3 mg/m ³ STEL: 3 mg/m ³ Mn

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin and Body Protection Wear chemically protective gloves to prevent skin contact. Wear protective clothing. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

Respiratory Protection Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. **WARNING!** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Earthy odor
Appearance	Dark brown liquid	Odor Threshold	Not determined
Color	Dark brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	< 0 °C / 32 °F	
Boiling Point/Boiling Range	94 °C / 202 °F	
Flash Point	Not available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	1.266-1.276	(1=Water)
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization	Hazardous polymerization does not occur.
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Conditions to Avoid

Keep out of reach of children. Avoid evaporating to dryness.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

Metal oxides. Sulfur oxides. Volatile organic compounds.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Eye Contact	Avoid contact with eyes. May cause eye irritation on direct contact.
Skin Contact	Avoid contact with skin. Causes mild skin irritation.
Inhalation	Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Ingestion	Do not taste or swallow. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting or diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary	= 9 g/kg (Rat)	-	-
Proprietary	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Target organ effects	Chronic ingestion may cause damage to heart, liver, and blood-forming tissues. Ingestion of large quantities may cause headache, mental impairment, dizziness, and may be fatal.

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Proprietary		866: 96 h Brachydanio rerio mg/L LC50 static 14: 96 h Lepomis macrochirus mg/L LC50 static 180: 96 h Oncorhynchus mykiss mg/L LC50 static		

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations. Contact your supplier or a licensed contractor for detailed recommendations.

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION**International Inventories**

Not determined

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances***US Federal Regulations**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Proprietary -		Proprietary	1.0

US State Regulations**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Proprietary	X	X	X
Proprietary	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

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Revision Note

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet