Safety Data Sheet

Issue Date: 02-Jan-2012 **Revision Date:** 10-Sep-2014 **Version** 1

1. IDENTIFICATION

Product Identifier

Product Name Colson Harvester Row Crop Mix

Other means of identification

SDS # CNI-033

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

Appearance Light brown liquid **Physical State** Liquid **Odor** Slight, sweet odor

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other Hazards

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Manganese	7439-96-5	1-10
Zinc	7440-66-6	1-10

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin Contact Wash skin thoroughly with mild soap and water. If irritation persists, seek medical attention.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If irritation persists, call a physician or poison control center.

Ingestion Drink plenty of water or milk immediately. Seek medical attention.

Most important symptoms and effects

Symptoms Mists of the product may be irritating to the respiratory tract. Eye contact may cause irritation and permanent damage if not treated promptly. May cause skin irritation. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting, convulsions, or diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Exposure may aggravate pre-existing respiratory or skin problems.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
None.

Hazardous Combustion Products Nitrogen oxides (NOx). Metal oxide/oxides. Sulfur oxides.

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. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up For small spills, absorb with sand, clay, or other inert absorbent. For large spills, dike far ahead of spill for later disposal. Do not release into sewers or waterways.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use in accordance with product label instructions. Keep away from children, pets, domestic animals, and wildlife.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in properly labeled containers. Store in compatible, corrosion resistant containers.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Manganese 7439-96-5	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
Copper 7440-50-8	TWA: 0.2 mg/m^3 fume TWA: 1 mg/m^3 Cu dust and mist	TWA: 0.1 mg/m^3 fume TWA: 1 mg/m^3 dust and mist (vacated) TWA: 0.1 mg/m^3 Cu dust, fume, mist	IDLH: 100 mg/m^3 dust, fume and mist IDLH: 100 mg/m^3 Cu dust and mist TWA: 1 mg/m^3 dust and mist TWA: 0.1 mg/m^3 fume TWA: 1 mg/m^3 Cu dust and mist
Molybdenum 7439-98-7	TWA: 10 mg/m^3 inhalable fraction TWA: 3 mg/m^3 respirable fraction	(vacated) TWA: 10 mg/m^3	IDLH: 5000 mg/m^3

Appropriate engineering controls

Engineering Controls Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear chemical safety goggles.

Skin and Body Protection Chemical resistant protective gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation or risk of inhalation of vapors, use suitable respiratory equipment.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid		
Appearance	Light brown liquid	**Odor**	Slight, sweet odor
Color	light brown	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	3.0	
Melting Point/Freezing Point	0 °C / 32 °F	
Boiling Point/Boiling Range	92.2 °C / 198 °F	
Flash Point	Not available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Light- not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	1.309-1.319	
Water Solubility	Freely Soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition 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 Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid
Avoid evaporating to dryness.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
Nitrogen oxides (NOx). Metal oxides. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Manganese 7439-96-5	= 9 g/kg (Rat)	-	-
Zinc 7440-66-6	> 8,437 mg/kg (rat)	-	-
Iron 7439-89-6	= 984 mg/kg (Rat)	-	-
Boron 7440-42-8	= 650 mg/kg (Rat)	-	-

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.

Chronic toxicity 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
Toxic to aquatic life with long lasting effects.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Zinc 7440-66-6	0.11 - 0.271: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.09 - 0.125: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	2.16 - 3.05: 96 h Pimephales promelas mg/L LC50 flow-through 0.211 - 0.269: 96 h Pimephales promelas mg/L LC50 semi-static 2.66: 96 h Pimephales promelas mg/L LC50 static 30: 96 h Cyprinus carpio mg/L LC50 0.45: 96 h Cyprinus carpio mg/L LC50 semi-static 7.8: 96 h Cyprinus carpio mg/L LC50 static 3.5: 96 h Lepomis macrochirus mg/L LC50 static 0.24: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.59: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.41: 96 h Oncorhynchus mykiss mg/L LC50 static		0.139 - 0.908: 48 h Daphnia magna mg/L EC50 Static
Iron 7439-89-6		13.6: 96 h Morone saxatilis mg/L LC50 static 0.56: 96 h Cyprinus carpio mg/L LC50 semi-static		

Copper 7440-50-8	0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.3: 96 h Pimephales promelas mg/L LC50 static 0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.052: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 1.25: 96 h Lepomis macrochirus mg/L LC50 static 0.3: 96 h Cyprinus carpio mg/L LC50 semi-static 0.8: 96 h Cyprinus carpio mg/L LC50 static 0.112: 96 h Poecilia reticulata mg/L LC50 flow-through		0.03: 48 h Daphnia magna mg/L EC50 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.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Manganese 7439-96-5	Ignitable powder
Zinc 7440-66-6	Ignitable powder Toxic

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

Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Zinc 7440-66-6	1000 lb		RQ 454 kg final RQ RQ 1000 lb final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Manganese - 7439-96-5	7439-96-5	1-10	1.0
Zinc - 7440-66-6	7440-66-6	1-10	1.0
Copper - 7440-50-8	7440-50-8	<1	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc 7440-66-6 (1-10)		X	X	

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Manganese 7439-96-5	X	X	X
Zinc 7440-66-6	X	X	X
Copper 7440-50-8	X	X	X
Boron 7440-42-8	X		
Molybdenum 7439-98-7	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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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