MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY INFORMATION

Trade Name (as labeled): Core Liquid Zinc 15%
Common Name: Liquid Fertilizer
Manufactured By: CoreAgri, LLC
PO Box 1027
Arroyo Grande, CA 93421

Business Phone: (805) 201-9049

Emergency Phone: INFOTRAC – (800) 535-5053

Date of Preparation: May 2009
Revised, March 2010

SECTION 2. COMPOSITION AND INFORMATION ON INGREDIENTS

			Exposure Limits In Air	
Chemical Name	**% by Weight**	**CAS #**	**ACGIH TVL (ppm)**	**OSHA PEL (ppm)**
Zinc Ammonium Complex	45-54%	Proprietary	NA	NA
Ammonium Hydroxide	0-3%	1336-21-6		
Water (H_2O)	43-55%	7732-18-5	None	None
NE = Not Established NA = Not Available				

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Emergency Overview: Clear to light amber colored liquid with a strong ammonia odor. Downwind exposure to ammonia fumes is likely. Responders should be prepared to use respiratory protection for exposures tp ammonia.

Symptoms Of Over Exposure:

Eyes: May cause severe irritation with prolonged exposure.
Skin: Prolonged or repeated exposure may cause skin irritation.
Inhalation: May cause breathing difficulties with prolonged exposure.
Ingestion: Can lead to stomachaches and nausea.

Hazardous Material Information Rating System:
(0 = least; 1 = slight; 2 = moderate; 3 = high; 4 = extreme)

Health (blue) **2**
Flammability (red) **0**
Reactivity (yellow) **0**

SECTION 4. FIRST-AID MEASURES

If Inhaled:	Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.
If Ingested:	Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of milk or water. Do not induce vomiting unless directed to do so by a medical professional. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs.
In Case Of Skin Contact:	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.
In Case Of Eye Contact:	Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists.
Victims of chemical exposure and all rescuers must be taken for medical attention. Take a copy of label and MSDS to physician or health professional with victim.	

SECTION 5. FIRE-FIGHTING MEASURES

Flash Point:	None.
Test Method:	Not pertinent.
LEL Flammable Limits:	Not pertinent.
UEL Flammable Limits:	Not pertinent.
Autoignition Temperature:	Not pertinent.
Extinguishing Media:	Does not burn.
Unusual Fire And Explosion Hazards:	None Known
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill And Leak Response: For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Gas masks or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7. STORAGE AND HANDLING

Storage Practices: Store in a cool area away from children, feed and food products. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage. Transfer equipment (valves, pumps, etc.) should be constructed of stainless steel or chemical-resistant plastic. Do not store or transport in aluminum or copper vessels.

Handling Practices: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

Work/Hygiene Practices: Avoid getting chemicals ON YOU or IN YOU. Wash hands with soap and water after handling chemicals. Do not eat or drink around or while handling chemicals. Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation/Engineering Controls: Use with adequate ventilation.

Respiratory Protection: If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.

Eye Protection: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

Hand Protection: Rubber gloves with gauntlets.

Body Protection: Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

Other Protective Measures: An eyewash and safety shower should be nearby and ready for use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to light amber colored liquid.	**Boiling Point:**	>212 °F.
Odor:	Pungent ammonia odor	**Crystallization Point:**	<32 °F.
pH:	9.5-11	**Freezing Point:**	NA.
Water Solubility:	100%.	**Vapor Pressure:**	NA.
Density:	10.0 lbs/gallon.	**Vapor Density (air = 1):**	NA.
Specific Gravity (H_2O = 1):	1.20	NA = Not Available.	

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable.
Conditions To Avoid: High Temperatures
Incompatibility: Strong Acids
Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data:
Zinc Chloride: LD_{50} oral-rat:350 mg/kg.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Stability: Zinc is stable in the environment. Its transport in the environment depends upon the exact compound, the pH, the soil type, and the salinity. All work practices should be aimed at eliminating environmental contamination.

SECTION 13. DISPOSAL CONSIDERATIONS

Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinsate. Dispose of waste effluents according to federal, state, and local regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this MSDS.

SECTION 14. TRANSPORTATION INFORMATION

This product is not regulated in surface transportation in non-bulk quantities. The information below is for shipments exceeding 3,200 pounds (320 gallons) in a single package, container, truck or railcar.

Proper Shipping Name:	Environmentally Hazardous Substance, Liquid N.O.S., (zinc chloride), (, UN3082, PGIII,RQ
Hazard Class:	Class 9
UN Identification Number:	UN3092
RQ:	1,000 lbs (Zinc Chloride)

SECTION 15. REGULATORY INFORMATION

SARA Reporting Requirements: This material contains the following toxic chemicals subject to reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR 372). Zinc Compounds – 15% (as zinc) and Ammonia – 13% (as Nitrogen)
California Proposition 65: WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
Marine Pollutant: Does not contain any material listed as a Marine Pollutant under 49 CFR 172.101.

SECTION 16. OTHER INFORMATION

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of CoreAgri knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by CoreAgri in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein