

# MATERIAL SAFETY DATA SHEET

## SECTION 1. PRODUCT AND COMPANY INFORMATION

**Trade Name (as labeled):** Core Zinc 12  
**Common Name:** Liquid Fertilizer  
**Manufactured By:** CoreAgri, LLC  
 PO Box 1027  
 Arroyo Grande, CA 93421

**Business Phone:** (805) 202-4371

**Emergency Phone:** INFOTRAC – (800) 535-5053

**Date of Preparation:** September, 2009  
 Revised November, 2010

## SECTION 2. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Exposure Limits In Air	
		ACGIH TVL (ppm)	OSHA PEL (ppm)
Zinc Sulfate (ZnSO <sub>4</sub> )	7733-02-0	NA	NA
Water (H <sub>2</sub> O)	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 no odor. Mild irritant. Sulfur trioxide fumes at temperatures above 1067°F. D.O.T. regulated in containers of more 320 gallons.

**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:** Zinc Sulfate is a human poison by ingestion. Can lead to stomachaches and nausea.

**Hazardous Material Information Rating System:**

(0 = least; 1 = slight; 2 = moderate; 3 = high; 4 = extreme)

**Health (blue)** 1  
**Flammability (red)** 0  
**Reactivity (yellow)** 0

## SECTION 4. FIRST-AID MEASURES

<b><u>If Inhaled:</u></b>	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.
<b><u>If Ingested:</u></b>	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.
<b><u>In Case Of Skin Contact:</u></b>	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.
<b><u>In Case Of Eye Contact:</u></b>	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

<b>Flash Point:</b>	None.
<b>Test Method:</b>	Not pertinent.
<b>LEL Flammable Limits:</b>	Not pertinent.
<b>UEL Flammable Limits:</b>	Not pertinent.
<b>Autoignition Temperature:</b>	Not pertinent.
<b>Extinguishing Media:</b>	Does not burn.
<b>Unusual Fire And Explosion Hazards:</b>	Sulfur trioxide fumes at temperatures above 1067 °F.
<b>Special Firefighting Procedures:</b>	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 (above 40 °F), dry, well-ventilated area away from incompatible materials. This product should be stored in tanks

constructed of mild steel with corrosion resistant coating, 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.

**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

**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

<b><u>Appearance:</u></b>	Clear to light amber colored liquid.	<b><u>Boiling Point:</u></b>	104 °C.
<b><u>Odor:</u></b>	None.	<b><u>Crystallization Point:</u></b>	38 to 43 °F.
<b><u>pH:</u></b>	4 to 5	<b><u>Freezing Point:</u></b>	NA.
<b><u>Water Solubility:</u></b>	100%.	<b><u>Vapor Pressure:</u></b>	NA.
<b><u>Density:</u></b>	11.5 lbs/gallon.	<b><u>Vapor Density (air = 1):</u></b>	NA.
<b><u>Specific Gravity (H<sub>2</sub>O = 1):</u></b>	1.379		NA = Not Available.

## SECTION 10. STABILITY AND REACTIVITY

**Stability:**

Stable.

**Conditions To Avoid:**

Not available.

**Incompatibility:**

Brass, steel, strong oxidizing agents.

**Hazardous Polymerization:**

Will not occur.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Toxicity Data:**

**Zinc Sulfate:** LD50 oral-rat: 2949 mg/kg.

**Acute Effects:**

**Eyes:** Mild irritant. May cause redness and/or burning.  
**Skin:** Mild irritant, especially with prolonged exposure. May cause skin ulceration.  
**Ingestion:** May cause stomach cramps and/or nausea.  
**Inhalation:** Moderate irritation of nose and throat. May cause dry coughing, wheezing, or chest tightness.  
**Chronic Effects:** None known.

## 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.

**Effect Of Material On Plants/Animals:** Mobile in soil profile.

**Effect Of Material On Aquatic Life:** High concentrations of zinc have been shown to be detrimental to aquatic life.

## 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

D.O.T.: Less Than 320 Gallons Not D.O.T. Regulated.  
 320 Gal. Or Larger Environmentally Hazardous Substance, Liquid, N.O.S.

Bulk Containers (Zinc Sulfate), 9, UN 3082, PG III, RQ 1000 lbs. (Placards Required for Containers of 320 Gal. Or More) ERG 171.

Other Shipping Information: Fertilizing Compounds (Manufactured), Liquid. NMFC Item 68140 Sub 6, LTL Class 60

## SECTION 15. REGULATORY INFORMATION

**SARA Reporting Requirements:** This material does contain toxic chemicals subject to reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986. (Zinc Compounds 26.75%)

**California Proposition 65:** WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## 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.