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material safety data sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Grain Coat™ Zn + Cu
Synonyms: Zinc and Copper Suspension Fertilizer and Seed coating
Product Type: Fertilizer
Company Name: Agrichem
2-4 Chetwynd St (PO Box 4037)
Loganholme QLD 4129 Australia
Date of Issue: October 8, 2008

2. HAZARDS IDENTIFICATION

Emergency Overview:

Appearance and Odor: Brown Green suspension with virtually no odor.

Warning Statements:

Keep out of reach of children.

CAUTION. Causes moderate eye irritation. Harmful if inhaled, swallowed or absorbed through the skin.

Avoid breathing vapor of spray mist.

Avoid contact with eyes, skin or clothing.

Potential Health Effects:

Likely Routes of Exposure: Inhalation, eye and skin contact.

Eye Contact: Irritation of eyes.

Skin Contact: Contact may cause irritation. Prolonged or repeated exposure may lead to reddening of skin, rash, dermatitis or other skin reactions.

Ingestion: Harmful if swallowed.

Inhalation: Inhalation of mist may cause irritation of the upper respiratory tract.

Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

See Section 12: ECOLOGICAL INFORMATION for more information.



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3. COMPOSTION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Zinc	1314-13-2	33.50
Copper	12069-69-1	8.4
Other Ingredients	Not Applicable	58.1

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point: Non-combustible

Autoignition Temperature: Not determined

Flammability Limits: Non-combustible

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Exposure Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): This is not a flammable product. Gases such as zinc oxide may be released.



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National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the state and/or local regulatory agencies.

7. HANDLING AND STORAGE

Handling:

Avoid breathing vapor or spray mist. Avoid contact with eyes, skin or clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage:

This product should be stored in its original container in a cool, dry place out of reach of children and out of direct sunlight. Do not use or store near open flame. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific conditions or a potential excessive exposure, use local exhaust ventilation at the point of generation.



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Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.

Respirator Protection: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an approved respirator.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Brown Green suspension with virtually no odor.
Boiling Point: >212° F
Solubility in Water: Not Soluble
Density: 16.7 pounds/gallon
Specific Gravity: 1.92-1.95
Evaporation Rate: Not determined
Vapor Density: Not determined
Freezing Point: 32° F
Vapor Pressure: Not determined
pH: 9-11



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Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: Strong oxidizing agents, strong reducers, and water-reactive materials.

Hazardous Decomposition Products: Toxic gases may be formed in a fire situation, carbon monoxide and other asphyxiates may form as well.

Hazardous Reactions: Hazardous polymerization will not occur.

11 TOXICOLOGICAL INFORMATION

Toxicological Data:

Data from laboratory studies on this product are summarized below:

Oral: Toxic if ingested

Dermal: Not determined

Inhalation: Nil

Eye Irritation: Irritation

Skin Irritation: May cause skin irritation

Skin Sensitization: Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Soil Absorption / Mobility: Limited mobility in soil profile.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

To avoid waste, use all material in this container by application according to label directions. If waste cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state and local governments).

Africa Asia Australia Europe Latin America Middle East North America



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Container Handling and Disposal:

Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and soap. Shake for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances. If burned, stay out of smoke.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT

Non Regulated – See 49 CFR 173.132 (b)(3)

IMDG

Non-Regulated – See IMDG 2.6.2.1.3 & 2.10.4.1

IATA

Non-Regulated – See IATA 3.6.1.5.3

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Immediate

Section 313 Toxic Chemical(s):

Africa Asia Australia Europe Latin America Middle East North America



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None

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

None

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed

16. OTHER INFORMATION

This material Safety Data Sheet (MSDS) serves different purposes and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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