MATERIAL SAFETY DATA SHEET

for RED EARTH G-8-F AQUA FUMIGATOR

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: RED EARTH G-8-F AQUA FUMIGATOR

GENERAL USE: Agua fumigator (Insecticide)

REFERENCE NUMBER: AKK0501

MANUFACTURER: EARTH CHEMICAL (TIANJIN) CO., LTD.
NO. 98 XIN AN ROAD, TEDA WEST, TIANJIN 300462 CHINA
EMERGENCY TELEPHONE NUMBER: +81 6 6920 1008

MSDS PREPARED BY: Earth Chemical Co., Ltd. International Headquarters

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2. COMPOSITION / INFORMATION ON INGREDIENTS

PRODUCT NATURE: Mixture (insecticidal agua fumigator)

INGREDIENTS AND CONTENT:

d-T80-cyphenothrin
 7.2%

 (\pm) - α -cyano-3-phenoxybenzyl (+) -cis/trans-chrysanthemate

• Inert ingredients 92.8%

Industrial calcium oxide as heat generator in fumigator can.

TOXIC SUBSTANCE: d-T80-cyphenothrin

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Not applicable

SPECIFIC HAZARD: May cause intense coughing by inhalation of fumigated

ingredients.

4. FIRST-AID MEASURES

INHALATION: For inhalation toxicity, see TOXICOLOGICAL INFORMATION for reference.

May cause intense coughing by inhalation of smoke. This coughing is temporary, but if coughing does not stop, or other abnormal symptoms appear, move person to fresh air immediately and rest quietly for first-aid. If breathing is weak, loosen clothing and open airway. Seek medical attention, and inform that this product is a pyrethroid insecticide.

SKIN CONTACT: Take off contaminated clothes and shoes. Wash contaminated area with soap and water. If pain or other abnormal symptoms occurs, seek medical attention immediately.

EYE CONTACT: May cause mild irritation if in contact during fumigation. Wash with fresh water for first-aid. Remove contact lenses if possible, and wash eye and behind eye-lids thoroughly. If pain or other abnormal

symptoms occurs, seek medical advice immediately.

INGESTION: For acute toxicity see TOXICOLOGICAL INFORMATION for reference. In case of accidental ingestion, wash mouth with water, give 1-2cups of water or milk to drink, and if conscious induce vomiting. Seek medical advice immediately; informing this product is a pyrethroid insecticide.

5. FIRE-FIGHTING MEASURES

Use carbon dioxide, powder extinguisher.

This product is sealed in an aluminum package and also a plastic container. It has no special cautions, but this product consists of calcium oxide, and may generate heat by reaction with water. (Product under normal storage conditions and no damage to packaging will not generate heat by coming in contact with water.)

6. ACCIDENTAL RELEASE MEASURES

Nil.

If aluminum package is torn, do not let product get in contact with water.

7. HANDLING AND STORAGE

HANDLING:

- Follow directions of use.
 - ① Close all doors and windows, Open all drawers, closets and cupboards.
 - 2 Pour indicated amount of water into plastic container, and place fumigator can inside. Set product in the middle of the room.
 - 3 Exit room and close door, as white smoke starts to generate.

| 10g | cockroach: | 10-13m ² | fly, mosquito: | 20-40m ² |
|------|----------------------------------|---------------------|----------------|-----------------------|
| 20g | cockroach: | 20-26m ² | fly, mosquito: | $40-80m^{2}$ |
| 30g | cockroach: | 30-40m ² | fly, mosquito: | 60-120m ² |
| 50g | cockroach: | 50-65m ² | fly, mosquito: | 100-200m ² |
| 100g | cockroach: 100-130m ² | | fly, mosquito: | 200-400m ² |

CAUTIONS:

- Remove or cover food, drinks, infant toys, feedstuff so as not to come in contact with chemical. Remove all pets, including birds and fishes, and house plants outside areas until the treatment is finished.
- Smoke will start to generate after fumigator can is set so get out from area after set.
- Fumigator will become hot after exposure to water. Do not touch directly with hand.
- Re-enter treated area after 2 hours or more from setting product. Open all doors and windows to ventilate. Re-enter after area is ventilated.
- Fire, smoke, and gas alarms may be activated by usage of product. Do not place
 directly below fire, smoke or gas alarm, and put plastic cover on alarms while
 using product. Watch out for open flames or other source of ignition, and remove
 cover from alarms after use of product.
- Cover or remove steel, copper, or brass products from treating areas as product

may cause change of color.

- Cover all precision mechanical equipment, such as personal computers, game machines, audio device and others, and store tapes and disks in a container as product may cause damage. Do not use in areas with a large sized computer.
- Do not use this product for infestation of bed clothing.
- Pour indicated amount of water into the container. Do not put too much water in.
- If clothing and beddings are contaminated, dry in the sun or brush off chemical. If dishes are contaminated, wash well with water.
- Use product as soon as aluminum package is opened.

SAFETY MEASURES:

- Take caution not to inhale or touch fumigated chemicals, especially if allergic, ill, pregnant, or under-age.
- Re-enter room after more than 2 hours from treatment.
- If any abnormal symptoms appear, seek medical advice, informing this product is a pyrethroid and oxadiazole mixture insecticide. If possible, show this MSDS to medical experts.

STORAGE:

TECHNICAL MEASURE: NII STORAGE SITUATION:

Avoid moisture, and store in cool environment, out of reach of children.

SAFE PACKING CONTAINER MATERIAL: No information.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Nil

9. PHYSICAL AND CHEMICAL PROPERTIES

SHAPE: Inner packaged content in a plastic outer container. Fumigator can of this product is a double structured can, with one side containing insecticide granule and other with heat generating agent.

COLOR: Pale yellow / orange-yellow

ODOR: Specific smell pH: Not applicable DENSITY: No information

SOLUBILITY IN SOLVENT : No information PHYSICAL TRANSFORMATION : No information

10. STABILITY AND INFORMATION

STABILITY: Product is stable for 3 years at room temperature if stored under normal conditions and there is no damage to packaging.

REACTIVITY: No reactivity if there is no damage to packaging. HAZARDOUS DECOMPOSITION PRODUCTS: No Information

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

LD₅₀ Oral, Rat male/female: more than 5000mg/kg

Oral, Mouse male/female: more than 5,000mg/kg

Dermal, Rat male/female: over 5000mg/kg

Dermal, Mouse male/female: more than 5,000mg/kg

LC50 Rat male/female: No death at 49 folds of normal usage.

(4 hours exposure)

SUBACUTE TOXICITY:

Rat NOEL: 3 folds of normal usage. (4 hours x 28 days continual exposure)

LOCAL EFFECT:

Irritation Rabbit eye: Mild irritation, alleviated by washing with water.

Rabbit skin: Nil

Allergy Guinea pig: Negative

12. ECOLOGICAL INFORMATION

ACCUMULATIVENESS: No Information

13. DISPOSAL CONSIDERATIONS

PACKAGING: Dispose can as inflammable garbage, after use. Empty bottles and

package films are to be disposed following district regulations.

14. TRANSPORT INFORMATION

Check for breakage, corrosion, and leakage before transport. Take extra care while loading, as to avoid reversing, falling, or damaging. Load firmly to avoid cargo collapse.

Air transport: Follow handling instructions for transporting goods classified under UN1910 (Calcium Oxide, class 8, UN packing group III).

Marine transport: Non-hazardous goods.

15. REGULATORY INFORMATION

Ministry of Agriculture of People's Republic of China: WP20090296

EPA (USA): Reg. No. 10308-18, EST No. 039921-CHN-001

16. OTHER INFORMATION

Department issuing data specification sheet:

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