MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Chlorpyrifos E-Pro 1% Mole Cricket Bait

Active Ingredient: Chlorpyrifos

Chemical Name: O,O-diethyl O-(3,5,6-trichloro-2-

pyridinyl) phosphorothioate

Chemical Formula: C₉H₁₁Cl₃NO₃PS

COMPANY IDENTIFICATION:

Etigra 501 Cascade Pointe Lane, Suite 103 Cary, NC 27513 UNITED STATES

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chlorpyrifos CAS No. 2921-88-2 1%

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

May be fatal if swallowed. Harmful if absorbed through skin or inhaled. Wash thoroughly with soap and water after handling. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Avoid breathing vapors. Chlorpyrifos is a cholinesterase inhibitor. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Treat symptomatically. Atropine, only by injection, is an antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. This product is an organophosphorus ester that inhibits cholinesterase.

POTENTIAL HEALTH EFFECTS: Symptoms of overexposure include headaches, nausea, vomiting, cramps, weakness, blurred vision, pin point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling, muscle spasms and coma.

POTENTIAL HEALTH HAZARDS:

EYE – Mildly irritating to the eyes. **SKIN** – Harmful if absorbed through skin. **INHALATION** – Slightly irritating to respiratory tract. **INGESTION** – May be harmful if swallowed.

POTENTIAL PHYSICAL HAZARDS: None

4. FIRST AID

IF SWALLOWED: Immediately call a poison control center or doctor. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Do not give anything by mouth to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Flush eyes with plenty of water. See a doctor if irritation develops.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor if irritation persists.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: This product is an organophosphorus ester that inhibits cholinesterase. In case of severe acute poisoning, the decision of whether to induce vomiting or not should be made by the attending physician. If lavage is performed, endotracheal and/or esophageal control is suggested. Danger from lung aspiration must be evaluated against toxicity when considering emptying the stomach. Treat symptomatically. In case of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration.

(continued on next page)

Manufactured for: Etigra 501 Cascade Pointe Lane Suite 103 Cary, NC 27513

REV 0107

www.etigra.com

Etigra

Emergency Phone: Chemtrec 800-424-9300

Effective Date: December 3, 2004

EPA Reg. No. 79676-6



4. FIRST AID (continued)

ANTIDOTE: Treat symptomatically based on judgment of the attending physician in response to reactions of the patient. Atropine (by injection only) is an antidote. Oximes such as 2-PAM/protopam, may be therapeutic but should only be used in conjunction with atropine. Contact your supplier or doctor to ensure this information is up to date.

5. FIRE-FIGHTING MEASURES

Flash point: Not applicable to this product.

Flammable Limits (LFL-UFL): Not applicable to this product. Fire and Explosion Hazards: Can burn in fire with irritating and toxic gases generated by thermal decomposition or combustion.

Means of Extinction: Use foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapors and decomposition products. Foam fire extinguishing system is preferred to prevent environmental damage from excessive water run off. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent/minimize run off.

Firefighting Equipment: Self-contained breathing apparatus with full facepiece. Wear full firefighting turn-out gear (Bunker gear).

Hazardous Combustion Products: Heat and fire may result in thermal decomposition and the release of hydrogen chloride, hydrogen, carbon, sulfur, phosphorus and nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately. Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8 "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of area.

SMALL SPILL: Vacuum or sweep up material and place in a container for reuse or disposal.

LARGE SPILL: Same as for small spills; may neutralize with dilute alkaline solutions of soda and ash and place into chemical waste container. Do not allow run off into soil, drainage systems, or bodies of water. Notify and consult with proper regulatory authorities.

7. HANDLING AND STORAGE

Keep out of reach of children and animals. Use only in a well-ventilated area.

Store in original container in a secured dry storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment: Eyes and Face: Safety glasses

Respiratory Protection: When handling in enclosed areas where exposure limits may be exceeded, use a dust/mist filtering respirator (NIOSH/MSHA approval number prefix TC-21C).

Protective Clothing: All pesticide handlers must wear a long-sleeved shirt and long pants and shoes plus socks.

Gloves: Waterproof gloves. Inspect gloves regularly for leaks. Thoroughly wash the outside of gloves with soap and water prior to removing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Tan Granule **Odor**: Slight mercaptan

pH: N/A

Boiling Point: N/A Melting Point: N/A Vapor Pressure: Nil % Volatile: < 3.0%

Solubility in Water: Not dispersible

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Avoid temperatures above 125°F (52°C)

CHEMICAL STABILITY: Product is normally stable. However, product may decompose if heated.

HAZARDOUS DECOMPOSITION PRODUCTS: Heat and fire may result in thermal decomposition and the release of hydrogen chloride, ethyl sulfide, diethyl sulfide, and nitrogen oxides.

INCOMPATIBILITY WITH OTHER MATERIALS: Alkaline conditions and materials.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE ORAL TOXICITY

Oral LD₅₀ (rat): > 2,000 mg/kg

ACUTE DERMAL TOXICITY

Dermal LD₅₀ (rat): > 2,000 mg/kg

ACUTE INHALATION TOXICITY

Inhalation LC₅₀ (rat): N/A

EYE IRRITANT

Rabbit - Slight irritation

SKIN IRRITATION

Rabbit - Very slight irritation

SENSITIZATION

Guinea pig – Non-sensitizing

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Pre-existing cholinesterase depression.

CARCINOGENICITY:

ACGIH: Not listed NTP: Not listed NTP: Not listed Not listed OSHA:

MUTAGENIC DATA: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

ADDITIONAL DATA: Chlorpyrifos is not known to exhibit reproductive or birth defects. Repeated or prolonged exposures may cause sensitization to subsequent exposures that mimic acute exposures.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This pesticide is toxic to birds and wildlife, and extremely toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites. Cover or incorporate spills. Do not contaminate water by cleaning of equipment or disposal of equipment wash water.

FISH TOXICITY

96 hour LC₅₀, Bluegill – 2.4 ppm 96 hour LC₅₀, Rainbow trout – 3.0 ppm

AVIAN TOXICITY

Oral LD₅₀, Mallard duck – 76.6 mg/kg

BEE TOXICITY: Highly toxic.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Environmentally Hazardous Substances, Solid, n.o.s. (Chlorpyrifos)

DOT HAZARD CLASS OR DIVISION: 9

DOT UN/NA NUMBER: UN3077 DOT PACKING GROUP: III REPORTABLE QUANTITY: 1 lb.

MARINE POLLUTANT: Severe Marine Pollutant DOT EMERGENCY RESPONSE GUIDE: 171

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

FIFRA -

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act. The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

OSHA HAZARD COMMUNICATION STANDARD STATUS: Regulated

SARA Title III – Section 302 Extremely Hazardous Substances Not listed

SARA Title III – Section 311/312 Hazardous Categories None

SARA Title III – Section 312 Threshold Planning Quantity The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients None

CERCLA

Chemical Name Wt.% RQ Chlorpyrifos 1.0% 1 lb.

CALIFORNIA PROP 65 STATUS – Not listed

16. OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

DISCLAIMER:

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