

# TM + IP E-Pro

Fungicide

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** TM + IP E-Pro Fungicide  
**Active Ingredients:** Thiophanate-methyl  $C_{12}H_{14}N_4O_4S_2$   
Iprodione  $C_{13}H_{13}Cl_2N_3O_3$

#### COMPANY IDENTIFICATION:

Etigra  
501 Cascade Pointe Lane, Suite 103  
Cary, NC 27513  
www.etigra.com

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Chemical Name	CAS #	Composition
Thiophanate-methyl	Dimethyl [(1,2-phenylene)bis(iminocarbonothioyl)]bis(carbamate)	23564-05-8	19.65%
Iprodione	3-(3,5-dichlorophenyl)-N-(1-methylethyl)-2,4-dioxo-1-imidazolidinecarboxamide	36734-19-7	19.65%

### 3. HAZARD IDENTIFICATION

#### EMERGENCY OVERVIEW

Causes moderate eye irritation. Harmful if absorbed through the skin, swallowed, or inhaled. Avoid contact with eyes, skin or clothing. Avoid breathing vapor and spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**POTENTIAL HEALTH EFFECTS:** Symptoms of over-exposure include nose bleeding, lacrimation, atonia of abdominal muscles, lethargy, decreased respiratory rate, mydriasis. Possible nausea, vomiting, and diarrhea.

#### POTENTIAL HEALTH HAZARDS:

**EYE** – Irritating and may temporarily injure eye tissue if not removed promptly.

**SKIN** – None known.

**INHALATION** – None known.

**INGESTION** – None known.

**POTENTIAL PHYSICAL HAZARDS:** None known.

### 4. FIRST AID

**IF SWALLOWED:** Immediately call a poison control center or doctor for treatment advice. Do not induce vomiting unless told to do so by the poison control center or doctor. Have person sip a glass of water if able to swallow. 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.

**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 for treatment advice.

**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.

### 5. FIRE-FIGHTING MEASURES

**Flashpoint:** Non-flammable

**Flammable Limits (LFL-UFL):** N/A

**Fire and Explosion Hazards:** N/A

**Means of Extinction:** N/A

**Fire Fighting Instructions:** Approach from upwind to avoid hazardous decomposition products. Foam fire extinguishing system is preferred to prevent environmental damage from excessive water runoff. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent/minimize runoff.

**Firefighting Equipment:** Self-contained breathing apparatus.

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

Manufactured for:  
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REV 0307

Etigra

Emergency Phone: Chemtrec 800-424-9300

Effective Date: January, 2006

EPA Reg. No. 79676-17



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## 6. ACCIDENTAL RELEASE MEASURES

Cover or incorporate. Add absorbent and sweep up spills. Avoid contact with skin or getting in eyes. Wash after using. Do not contaminate water by cleaning of equipment or disposal of wastes.

## 7. HANDLING AND STORAGE

Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal. Wash thoroughly after handling this product. Store in a cool, clean, dry place. Do not store at temperatures exceeding 120°F or at temperatures below 32°F

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Personal Protective Equipment (PPE):

Mixers, loaders, others exposed to the concentrate and cleaners/repairers of equipment must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant apron and
- Chemical-resistant footwear plus socks

Applicators using handheld equipment must wear:

- Coveralls or long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposures and
- Dust-mist filtering respirator (NIOSH-approved respirator with any R, P or HE filter)

Applicators using mechanical and ground equipment must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Applicators using truck-mounted equipment with a handgun at the end of the hose (i.e., for commercial turfgrass or ornamental applications) and all other handlers not specified above must wear:

- Long-sleeved shirt and long pants and shoes plus socks
- Chemical-resistant gloves

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** emulsion liquid

**pH:** 7.46

**Flashpoint (method):** N/A

**Density:** 1.152 g/ml

**Solubility in Water:** Soluble

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** None known.

**CHEMICAL STABILITY:** Product is normally stable. However, product may decompose if heated for an extended period.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Heat and fire may result in thermal decomposition and the release of hydrogen chloride and oxides of nitrogen, sulfur and carbon.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong oxidizers, acids and bases

**POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE ORAL TOXICITY

Oral LD<sub>50</sub> (rat, female): 1750 mg/kg

### ACUTE DERMAL TOXICITY

Dermal LD<sub>50</sub> (rat): > 5,000 mg/kg

### ACUTE INHALATION TOXICITY

Inhalation LC<sub>50</sub> (rat): 2.03 mg/L

### EYE IRRITANT

Rabbit – Minimal Irritant

### SKIN IRRITATION

Rabbit – Slight Irritant

### SENSITIZATION

Guinea Pig – Not a sensitizer

### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Skin abrasions and sores

### CARCINOGENICITY:

**ACGIH:** Not listed

**IARC:** Not listed

**NTP:** Not listed

**OSHA:** Not listed

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

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** This chemical can contaminate surface waters through aerial and ground spray applications. Under some conditions, it may also have a high potential for runoff into surface water after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips and areas overlaying tile drainage systems that drain to surface water.

This product is toxic to invertebrates. Do not apply directly to water, 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 neighboring areas. Cover, incorporate or clean up spills. Do not contaminate water when disposing of equipment washwater or rinsate.

## 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:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incinerate, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not reuse empty container.

## 14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Not regulated by DOT  
DOT HAZARD CLASS OR DIVISION: N/A  
DOT UN/NA NUMBER: N/A  
DOT PACKING GROUP: N/A  
MARINE POLLUTANT: Not listed.  
DOT EMERGENCY RESPONSE GUIDE: N/A

## 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:**  
Not Regulated

#### SARA Title III – Section 302 Extremely Hazardous Substances

Not Listed

#### SARA Title III – Section 311/312 Hazard Categories

Immediate

#### 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 –

<u>Chemical Name</u>	<u>Wt. %</u>	<u>RO</u>
Thiophanate-methyl	19.65%	1 lb.

#### CALIFORNIA PROP 65 STATUS –

Listed (Iprodione, Thiophanate-methyl)

## 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.

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