



## Safety Data Sheet

Report Date 17-Mar-15

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### 1. Identification

**Product Name** : Helena T-Methyl 4.5 F - T&O  
**Synonyms** : Thiophanate-methyl  
**Product Use** : Fungicide  
**Manufacturer/Supplier** : Helena Chemical Company  
**Address** : 225 Schilling Blvd. Collierville, TN 38017  
**General Information** : 901-761-0050  
**Transportation Emergency Number** : CHEMTREC:800-424-9300

### 2. Hazard Identification



**Signal Word** : Warning  
**Skin Irritation** : Slightly irritating  
**Eye Irritation** : Practically non-irritating  
**Acute Toxicity Oral** : >5,000 mg/kg (rat)  
**Acute Toxicity Dermal** : >5,050 mg/kg (rat)

**Hazard Categories** : Eye Irritation - 2B; Skin Irritation - 3; Inhalation Toxicity - 4; Oral/Dermal Toxicity - 5/5

**Hazard Statement** : May be harmful if swallowed  
May be harmful in contact with skin  
Causes eye irritation  
Causes mild skin irritation  
Harmful if inhaled

### 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Thiophanate-methyl	23564-05-8	46.2
Other ingredients	Nonhazardous	53.8

### 4. First Aid Measures

**Eye** : Rinse eyes cautiously with water for several minutes. Remove contact lenses, if present and easy to do, and continue rinsing. If eye irritation persists, get medical advice/attention.

**Skin** : Call a doctor or poison control center if you feel unwell.

**Inhalation** : Call a doctor or poison control center if you feel unwell.

**Ingestion** : Call a doctor or poison control center if you feel unwell.

**Indication of Immediate Medical Attention and Special Treatment Needed** : Have the product container or label with you when call a poison control center or doctor, or going for medical treatment.

### 5. Fire Fighting Measures

**Extinguishing Media** : Use water fog, foam, dry chemical or carbon dioxide. Foam or dry chemical extinguishing systems are preferred to prevent environmental damage from excessive water runoff.



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- Specific Hazards Arising from the Chemical** : May produce toxic fumes.
- Special Fire Fight Proc** : Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water/fire fighting water; do not allow to enter drains or waterways.

### 6. Accidental Release Measures

- Personal Precautions** : Isolate area and keep unnecessary and unprotected personnel from entering.
- Protective Equipment** : Wear long-sleeved shirt, long pants, shoes, socks, chemical-resistant gloves made of any waterproof material, and a chemical-resistant apron.
- Emergency Procedures** : Control spill at the source and prevent material from entering soil, sewers, waterways or low areas. Large spills to soil or similar surfaces may require removal and disposal. Contain contaminated water/fire fighting water.
- Methods and Materials for Containment and Cleanup** : Pump free liquid into suitable closed containers for disposal. After decontamination, spill area can be washed with water. Collect washwater for approved disposal. Decontaminate tools and equipment following cleanup.

### 7. Handling and Storage

- Precautions for Safe Handling** : Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Conditions for Safe Storage** : Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with applicable regulations.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : Not established
- Appropriate Engineering Controls** : Facilities storing or utilizing this material should be equipped with eyewash station and a safety shower.
- Personal Protective Equipment** : Wear long-sleeved shirt, long pants, shoes, socks, chemical-resistant gloves made of any waterproof material, and a chemical-resistant apron.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Off-white liquid, faint sulfur odor.
- Flash Point, °F** : >94 Degrees C.
- Boiling Point, °F** : Not specified
- Melting Point(Freezing point), °C** : Not specified
- Vapor Pressure, mm Hg @ 20 °C** : Not specified
- Vapor Density** : Not specified
- Solubility in Water** : Dispersible
- Molecular Formula** : Not specified
- Density, g/mL @ 25 °C** : 1.118
- Evaporation Rate(Butyl Acetate = 1)** : Not specified
- Octanol/Water Partition Coefficient** : Not specified
- pH** : 5.5-6.0



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**Flammable Limits (approximate volume % in air)** : Not specified  
**Auto-ignition Temperature** : Not determined  
**Decomposition temperature** : Not specified

### 10. Stability and Reactivity

**Reactivity** : No hazardous reactions should occur.  
**Chemical Stability** : Stable  
**Hazardous Decomposition Products** : May release oxides of carbon, nitrogen and sulfur when thermally decomposed.  
**Hazardous Polymerization** : Will not occur.  
**Conditions to Avoid** : Avoid excessive heat.  
**Incompatible Materials** : Strong oxidizing agents.

### 11. Toxicological Information

**Acute Toxicity (Oral LD50)** : >5,000 mg/kg  
**Acute Toxicity (Dermal LD50)** : >5,050 mg/kg  
**Acute Toxicity Inhalation LC50** : >2.17 mg/L/4 hour  
**Likely Routes of Exposure** : Skin, eyes, inhalation, ingestion.  
**Skin Irritation** : Slightly irritating  
**Eye Irritation** : Practically non-irritating  
**Skin Sensitization** : Not a contact sensitizer  
**Carcinogenic** : Not listed by IARC, NTP or OSHA.  
**Chronic Effects** : No evidence of mutagenic effects during in vivo and in vitro assays. Not known to cause reproductive or birth defects at normal exposure levels.  
**Other Hazards** : CA Prop 65: This product contains a chemical(s) known to the state of California to cause cancer and birth defects or reproductive harm (thiophanate-methyl).

### 12. Ecological Information

**Ecotoxicity** : Bluegill (96-hour LC50) >41 ppm; Rainbow Trout (96-hour LC50) = 8.3 ppm; Daphnia (48-hour EC50) = 5.4 ppm; Mysid (96-hour LC50) = 1.1 ppm.  
**Persistence and Degradability** : Not specified  
**Bioaccumulative Potential** : Not specified  
**Mobility in Soil** : Not specified  
**Other Adverse Effects** : Runoff may be hazardous to aquatic organisms. Do not contaminate water when disposing of equipment washwater or rinsate.

### 13. Disposal Considerations

**Waste Disposal Method** : Do not contaminate water, food or feed by disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. Do not reuse or refill nonrefillable containers. Refer to product label for container disposal instructions.

### 14. Transport Information



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**UN Proper Shipping Name** : Containers  $\geq$  2 gallons and  $<$ 119 gallons: RQ, Environmentally Hazardous Substance, Liquid, n.o.s. (Thiophanate-methyl)  
**Transport Hazard Class** : Class 9  
**UN Identification Number** : UN3082  
**Packaging Group** : PG III  
**Environmental Hazards** : Marine Pollutant  
**Transport in Bulk** : RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Thiophanate-methyl), 9, PG III, Marine Pollutant  
**Special Precautions for Transportation** : Not regulated in single packages  $<$ 2 gallons.  
**Freight Classification** : Pesticides, NOI, Fungicides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

## 15. Regulatory Information

**National Fire Protection Association Rating** :

Health: 1 Fire: 1 Reactivity: 0  
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

**S.A.R.A Title III Hazard Classification (Yes/No)** :

Immediate( Acute) Health: Y  
Delayed (Chronic) Health: N  
Sudden Release of Pressure: N  
Fire: N  
Reactive: N

**FIFRA Information** : This Chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labelling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Registration Number** : 87373-4-5905  
**FIFRA Signal Word** : Caution  
**FIFRA Label Statement** : Harmful if swallowed, inhaled or absorbed through skin.  
**FIFRA Label Statement** : Causes moderate eye irritation.  
**FIFRA Label Statement** : Avoid contact with skin, eyes or clothing.  
**FIFRA Label Statement** : Avoid breathing vapor or spray mist.  
**FIFRA Label Statement** : No additional label statements.  
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## 16. Other Information

**Data of Preparation/Revision** : 17-March-2015