



# Safety Data Sheet

Report Date 21-Aug-15

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## 1. Identification

**Product Name** : FYFANON  
**Synonyms** : Malathion Insecticide  
**Product Use** : Organophosphorous Pesticide  
**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** : Danger  
**Skin Irritation** : Causes mild skin irritation  
**Eye Irritation** : Causes eye irritation  
**Acute Toxicity Oral** : LD50 >3,000 mg/kg (rat)  
**Acute Toxicity Dermal** : LD50 >2,020 mg/kg (rabbit)

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

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

## 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Malathion	121-75-5	56.44
Petroleum Distillates	64742-94-5	39.56
Inert ingredients, including emulsifiers		4.00

## 4. First Aid Measures

**Eye** : Hold eyes 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 further treatment advice.

**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.

**Inhalation** : Move to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth.

**Ingestion** : Call a physician or poison control center immediately. Drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**Indication of Immediate Medical Attention and Special Treatment Needed** : Fyfanon is a cholinesterase inhibitor with moderate oral toxicity. Administer atropine sulfate at 2 to 4 mg doses intravenously or intramuscularly. Repeat at 15 minute intervals until atropinization occurs.

## 5. Fire Fighting Measures



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- Extinguishing Media** : Use foam, dry chemical, carbon dioxide or water spray when fighting fires involving this material.
- Specific Hazards Arising from the Chemical** : Containers may burst or explode from excessive heat during a fire. Vapors may travel back along the floor to ignition source and flash back.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective equipment. Fight fire from upwind. Avoid runoff.

### 6. Accidental Release Measures

- Personal Precautions** : Keep unprotected and unnecessary personnel out of spill area.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Use air-purifying respirator with NIOSH prefix TC-21C when needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Isolate spill area. Prevent contamination to streams, sewers, lakes and ponds.
- Methods and Materials for Containment and Cleanup** : Dike to confine spill and absorb with an absorbent such as clay, sand or cat litter. Vacuum, shovel or scoop up spilled material and place in an approved container for proper disposal. To decontaminate spill area or cleanup equipment, wash with a suitable solution (e.g., organic solvent, bleach or caustic), collect and place in drums with collected spill material.

### 7. Handling and Storage

- Precautions for Safe Handling** : Keep locked up and out of reach of children. Do not contaminate water, food or feed by storage, handling or disposal. Keep container tightly closed. Do not allow water to be introduced into the contents of the container.
- Conditions for Safe Storage** : Store in original container only. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : TLV=1 mg/m3 (malathion; inhalable fraction, vapor and aerosol, skin); PEL=15 mg/m3 (malathion, skin)
- Appropriate Engineering Controls** : Local exhaust should be sufficient.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Use air-purifying respirator with NIOSH prefix TC-21C when needed. Eyewash and emergency shower should be available in work area.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Clear, yellow liquid with putrid (mercaptan) odor.
- Flash Point, °F** : >150 Degrees F.
- Boiling Point, °F** : 300 Degrees F. (technical)
- Melting Point(Freezing point), °C** : <32 Degrees F.
- Vapor Pressure, mm Hg @ 20 °C** : 9 mmHg
- Vapor Density** : 3.6 (air=1.0)
- Solubility in Water** : 0.01%
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.060-1.080
- Evaporation Rate(Butyl Acetate = 1)** : Not determined
- Octanol/Water Partition Coefficient** : No information found
- pH** : 3.0 to 6.0 (at 1.0%)



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**Flammable Limits (approximate volume % in air)** : Not determined  
**Auto-ignition Temperature** : Not determined  
**Decomposition temperature** : No information found

### 10. Stability and Reactivity

**Reactivity** : No information found  
**Chemical Stability** : Stable  
**Hazardous Decomposition Products** : Thermal decomposition and burning may produce highly toxic byproducts.  
**Hazardous Polymerization** : Will not occur  
**Conditions to Avoid** : None currently known  
**Incompatible Materials** : Avoid alkaline and acidic conditions and materials. Avoid oxidizing materials.

### 11. Toxicological Information

**Acute Toxicity (Oral LD50)** : >3,000 mg/kg (rat). May be harmful if swallowed.  
**Acute Toxicity (Dermal LD50)** : >2,020 mg/kg (rabbit). May be harmful in contact with skin.  
**Acute Toxicity Inhalation LC50** : >7.03 mg/L (rat). Toxic if inhaled. Vapor or spray mists may be harmful if inhaled.  
**Likely Routes of Exposure** : Skin, inhalation, eyes, ingestion.  
**Skin Irritation** : Causes mild skin irritation.  
**Eye Irritation** : Causes eye irritation.  
**Skin Sensitization** : Not a skin sensitizer.  
**Carcinogenic** : None currently known.  
**Chronic Effects** : Malathion is a cholinesterase inhibitor. Overexposure may cause depressed cholinesterase activity, headache, excessive salivation, vomiting, uneasiness, anxiety, tremors, nausea, diarrhea, abdominal cramps and other symptoms.  
**Other Hazards** : None currently known.

### 12. Ecological Information

**Ecotoxicity** : Marine Pollutant, listed on Appendix B to 49 CFR 172.101.  
**Persistence and Degradability** : No information found  
**Bioaccumulative Potential** : No information found  
**Mobility in Soil** : No information found  
**Other Adverse Effects** : No information found

### 13. Disposal Considerations

**Waste Disposal Method** : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

### 14. Transport Information

**UN Proper Shipping Name** : Not regulated by DOT in single containers of less than 20 gallons. Regulated in all sizes by IMDG.  
**Transport Hazard Class** : None if package <20 gallons.  
**UN Identification Number** : None if <20 gallons  
**Packaging Group** : None if package <20 gallons.



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- Environmental Hazards** : Marine Pollutant (malathion)  
**Transport in Bulk** : For shipment in bulk packages (>119 gallon), ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Malathion), 9, PG III, Marine Pollutant "ERG # 171"  
**Special Precautions for Transportation** : If shipped in single package >= 20 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s. (Malathion), 9, PG III "ERG # 171"  
**Freight Classification** : Pesticides, NOI, Insecticides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

## 15. Regulatory Information

**National Fire Protection Association Rating** :

Health: 2 Fire: 2 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: Y  
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** : 5905-196

**FIFRA Signal Word** : Warning

**FIFRA Label Statement** : Causes substantial but temporary eye injury.

**FIFRA Label Statement** : Do not get in eyes.

**FIFRA Label Statement** : Harmful if swallowed.

**FIFRA Label Statement** : Harmful if absorbed through skin.

**FIFRA Label Statement** : Avoid contact with skin and clothing.

**FIFRA Label Statement** : Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**FIFRA Label Statement** : No additional label statements.

## 16. Other Information

**Data of Preparation/Revision** : 21-August-2015