



# Safety Data Sheet

Report Date 13-Jan-17

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## 1. Identification

**Product Name** : FYFANON 8 LB. EMULSION  
**Synonyms** : None  
**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** : Warning  
**Skin Irritation** : Not classified as hazardous under 29 CFR 1910.1200 (2012)  
**Eye Irritation** : Causes eye irritation  
**Acute Toxicity Oral** : LD50 >550 mg/kg (rat)  
**Acute Toxicity Dermal** : LD50 >2,000 mg/kg (rabbit)

**Hazard Categories** : Oral/Derm/Inh Tox-4/4/4; Eye Irr-2B; Skin Sensitization-1; STOT, Single-2; Comb Liq-4; Aquatic Tox-2

**Hazard Statement** : Harmful if swallowed  
Harmful in contact with skin  
Causes eye irritation  
Harmful if inhaled  
May cause an allergic skin reaction  
May cause damage to organs  
May cause damage to organs through prolonged or repeated exposure  
Combustible liquid  
Toxic to aquatic life

## 3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Malathion (O,O-Dimethyl phosphorodithioate of diethyl mercaptosuccinate)	121-75-5	81.8
Confidential formulation aids	Proprietary	18.2



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### 4. First Aid Measures

- Eye** : Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. Call a poison control center or doctor for 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 person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
- Ingestion** : Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth if unconscious.
- Indication of Immediate Medical Attention and Special Treatment Needed** : Treat symptomatically. Symptoms may be delayed. This product may cause cholinesterase inhibition. Atropine is antidotal. 2-PAM may be effective as an adjunct to atropine.

### 5. Fire Fighting Measures

- Extinguishing Media** : Use dry chemical, carbon dioxide, alcohol foam, foam, water spray or water fog extinguishing agents.
- Specific Hazards Arising from the Chemical** : Product will decompose rapidly when heated to temperatures at or over 280 Degrees F. Release of volatile, toxic compounds such as dimethyl sulfide, sulfur dioxide, carbon monoxide and phosphorus pentoxide are possible.
- Special Fire Fight Proc** : Wear self-contained breathing apparatus and full protective clothing. Fight fire from upwind. Avoid runoff.

### 6. Accidental Release Measures

- Personal Precautions** : Avoid inhalation of vapors and spray mist. Avoid contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.
- Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.
- Emergency Procedures** : Prevent contamination to streams, sewers, lakes and ponds.
- Methods and Materials for Containment and Cleanup** : Small Spills: Wipe up with absorbent cloth. Clean surface thoroughly to remove residual contamination. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with vermiculite, dry sand or earth. Collect and place in containers. Flush contaminated area thoroughly with water, absorb and place in containers with collected product.

### 7. Handling and Storage



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- Precautions for Safe Handling** : Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothes. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Conditions for Safe Storage** : Product should be stored in the original unopened container in a secure, dry place. Do not contaminate other pesticides or fertilizers. Product should never be heated above 131 Degrees F. and should not be stored for long periods of time at temperatures in excess of 77 Degrees F. Do not contaminate water, food or feed by storage or disposal.

### 8. Exposure Controls / Personal Protection

- TLV/PEL** : Malathion: PEL=15 mg/m<sup>3</sup> (total dust), skin; TLV=1 mg/m<sup>3</sup> (measured as inhalable fraction and vapor).
- Appropriate Engineering Controls** : Provide adequate general and local exhaust ventilation.
- Personal Protective Equipment** : Splashproof goggles or face shield, impervious gloves, impervious apron and footwear. Respiratory protection not normally needed. Eyewash and emergency shower should be available in work area.

### 9. Physical and Chemical Properties

- Odor/Appearance** : Straw to amber-colored liquid; mild petroleum odor
- Flash Point, °F** : 198.5 Degrees F.
- Boiling Point, °F** : No data available
- Melting Point(Freezing point), °C** : No data available
- Vapor Pressure, mm Hg @ 20 °C** : Not established
- Vapor Density** : No information found
- Solubility in Water** : Soluble
- Molecular Formula** : Not applicable, formulated mixture.
- Density, g/mL @ 25 °C** : 1.19
- Evaporation Rate(Butyl Acetate = 1)** : Not established
- Octanol/Water Partition Coefficient** : No information found
- pH** : 3.69 (10%)
- Flammable Limits (approximate volume % in air)** : No data available
- Auto-ignition Temperature** : No data available
- Decomposition temperature** : 280 Degrees F.

### 10. Stability and Reactivity

- Reactivity** : No information found



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- Chemical Stability** : Stable
- Hazardous Decomposition Products** : Volatile toxic compounds, such as dimethyl sulfide, sulfur dioxide, carbon monoxide, and phosphorus pentoxide, may be released in a fire situation.
- Hazardous Polymerization** : Will not occur
- Conditions to Avoid** : Excessive heat, open flame or extreme cold.
- Incompatible Materials** : Strong bases and oxidizers. This product can corrode iron, steel, tin plate and copper. Rapidly hydrolyzed at pH>7.0.

### 11. Toxicological Information

- Acute Toxicity (Oral LD50)** : >550 mg/kg (rat). Harmful if swallowed.
- Acute Toxicity (Dermal LD50)** : >2,000 mg/kg (rabbit). Harmful in contact with skin.
- Acute Toxicity Inhalation LC50** : >5.1 mg/L/4 hour (rat). Harmful if inhaled.
- Likely Routes of Exposure** : Ingestion, skin, inhalation, eyes.
- Skin Irritation** : Not classified as hazardous under 29 CFR 1910.1200 (2012).
- Eye Irritation** : Causes eye irritation.
- Skin Sensitization** : May cause an allergic skin reaction.
- Carcinogenic** : ACGIH-Not classifiable as human carcinogen. IARC-Unclassifiable as to carcinogenicity in humans.
- Chronic Effects** : Specific Target Organ Toxicity, Repeated Exposure: May cause damage to organs through prolonged or repeated exposure.
- Other Hazards** : Specific Target Organ Toxicity, Single Exposure: May cause damage to organs (eyes, skin, respiratory system, liver, blood cholinesterase, CNS, CVS, GI tract).

### 12. Ecological Information

- Ecotoxicity** : Toxic to aquatic life (acute). This product is toxic to fish and aquatic invertebrates. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
- Persistence and Degradability** : Malathion is biodegradable but does not fulfill criteria for being readily biodegradable.
- Bioaccumulative Potential** : Bioconcentration potential is low (BCF 95).
- Mobility in Soil** : Malathion is of medium mobility in soil under normal conditions, but degrades rapidly.
- Other Adverse Effects** : Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

### 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.



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### 14. Transport Information

**UN Proper Shipping Name** : Not regulated by DOT in single containers of less than 12.5 gallons. Regulated in all sizes if shipped by air (IATA) or water (IMDG).

**Transport Hazard Class** : None

**UN Identification Number** : None

**Packaging Group** : None

**Environmental Hazards** : Malathion reportable quantity (RQ) is 100 lbs ( $\geq$  12.5 gallons). Malathion is not listed as a Marine Pollutant per Appendix B to 49 CFR 172.101.

**Transport in Bulk** : If shipped in a single package greater than or equal to 12.5 gallons, ship as: RQ, UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Malathion), 9, PG III "ERG # 171"

**Special Precautions for Transportation** : If shipped by air (IATA) or water (IMDG), ship as: UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Malathion), 9, PG III, Marine Pollutant

**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: Y  
Sudden Release of N  
Pressure:  
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** : 5905-250

**FIFRA Signal Word** : Caution

**FIFRA Label Statement** : Keep out of reach of children.

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

**FIFRA Label Statement** : Causes moderate eye irritation.

**FIFRA Label Statement** : Avoid contact with eyes, skin, or clothing.

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

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

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

### 16. Other Information

**Data of Preparation/Revision** : 13-January-2017



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