

## MATERIAL SAFETY DATA SHEET

**PRODUCT:** Malathion 50 EC Liquid Insecticide

### SECTION 1 - PRODUCT INFORMATION

**P.C.P. Act Registration No.:** 16099

**Code:** 152030

**Chemical Name:** Malathion: O,O-dimethyl-S-(1,2(diethoxycarbonyl)-ethyl) phosphorodithioate

**Synonyms:** Fyfanon

**Chemical Family:** Organophosphate

**Product Use:** Insecticide

**TDG Classification:** Not Regulated by Road/Rail Transport. Regulated by Marine Transport: Limited Quantity

### SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	WEIGHT %	CAS REG #	LD50 (mg/Kg)	T.W.A. - T.L.V.
Malathion	50	121-75-5	Oral, rat 1375 Dermal, rat 2000	LC50 5.2 mg/L
Petroleum Distillates	40 - 50	64742-94-5	Oral >10 mL/Kg	>3800 mg/m <sup>3</sup> /4h
Calculate LD50 for mixture			2750	

### SECTION 3 - PHYSICAL DATA

**Physical State:** Liquid

**Specific Gravity:** 1.054

**Boiling Point:** 179-213 °C

**Vapour Pressure:** No Data

**% Volatiles:** 50 %

**Solubility in Water:** Emulsifies

**Appearance\Odour:** Brown liquid with solvent odour

**pH:** No Data

**Freezing/Melting Point:** No Data

**Vapour Density:** Greater than air

**Evaporation Rate:** No Data

### SECTION 4 - FIRE AND EXPLOSION

**Flash Point:** 65 °C T.C.C.

**Lower Explosion Limit %:** 1 %

**Fire Extinguishing Media:** Foam, Carbon Dioxide, Dry Chemical, Water Fog

**Fire Fighting Procedures:** Wear self-contained Breathing Apparatus and impervious clothing. Minimize the amount of water used and contain the run-off.

**Other Fire or Explosion Hazards:** Vapours may travel to ignition source and flash back.

**Autoignition Temperature:** 510 °C

**Upper Explosion Limit %:** 7 %

### SECTION 5 - REACTIVITY DATA

**Stability:** Stable

**Hazardous Polymerization:** No.

**Conditions to Avoid:** Elevated temperatures will decompose at 100 °C and above.

**Incompatibility (Materials to Avoid):** Strong alkalis and oxidizers.

**Hazardous Decomposition Products:** Thermal decomposition may produce dimethylsulfide, sulphur dioxide, carbon oxides, phosphoropentoxide and nitrogen oxides.

# Malathion 50EC Liquid Insecticide

## SECTION 6 - HEALTH HAZARD DATA

**Acute Effects of Overexposure:** May cause temporary irritation to eyes, nose, throat, and respiratory tract. May cause headache, nausea, vomiting, abdominal cramps, weakness, blurred vision, pin-point pupils, tightness in chest, muscle spasms and coma.

**Effects of Chronic Exposure:** Prolonged exposure may cause dermatitis.

**Other Health Effects:** Malathion is a cholinesterase inhibitor. **NOTE TO PHYSICIAN:** The antidote is atropine. Large doses at 2 to 4 mg intravenously or intramuscularly as soon cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear.

## SECTION 7 - FIRST AID PROCEDURES

**Inhalation:** Move victim to fresh air and restore breathing if required. OBTAIN MEDICAL ADVICE.

**Skin Contact:** Flush skin with running water and thoroughly wash with soap and water. If irritation persists seek MEDICAL ADVICE.

**Ingestion:** Give 1 to 2 glasses water (200 to 500 ml) to dilute material. Do Not Induce Vomiting. OBTAIN MEDICAL ADVICE. Never give anything by mouth to an unconscious person.

**Eye Contact:** Flush eyes with running water for 20 minutes. Hold eyelids open during flushing. If irritation persists seek Medical Attention.

## SECTION 8 - PREVENTIVE MEASURES

**Respiratory Protection:** NIOSH/MSHA approved respirator, if required.

**Eye Protection:** Safety goggles.

**Skin Protection:** Chemical resistant gloves

**Other Personal Protective Equipment:** Coveralls.

**Engineering Controls:** Local exhaust or ventilation.

**Handling Procedures and Equipment:** Avoid breathing vapours, contact with eyes, skin and clothing. Wash thoroughly after use.

**Storage Requirements:** Store in cool, dry, ventilated area. Keep out of reach of children and pets.

**Storage Temperature:** Min: 5 °C Max: 40 °C

## SECTION 9 - ENVIRONMENTAL PROTECTION DATA

**Spill and Leak Procedures:** Eliminate all ignition sources. Stop leak, contain spill by diking and absorb with suitable absorbent and transfer into waste container for disposal. Clean area with detergent and water, absorb wash and place in waste container. Remove any contaminated soil for proper disposal.

**Waste Disposal:** Dispose of empty container in household garbage. Dispose of waste product in accordance with Local, Provincial or Federal government regulations.

**Environmental Effects:** Do not contaminate local water supplies or environments.

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**Prepared by:** Technical Department

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