

MATERIAL SAFETY DATA SHEET

WINFIELD SOLUTIONS, LLC

PRODUCT NAME(S)For Emergency Call: 800-228-5635 or
Chem Trec: 800-424-9300**MALATHION 5**

Effective Date: 09/14/07

I. IDENTIFICATION**CHEMICAL NAME OF PRIMARY COMPONENT(S):** Diethyl (dimethoxyphosphinothioylthio) succinate**FORMULA:** C₁₀H₁₉O₆P S₂**MOLECULAR WEIGHT:** 330.3**SYNONYMS:** Malathion**CAS # & NAME:** 121-75-5 Malathion**EPA Reg No.** 9779-5**II. INGREDIENTS/SUMMARY OF HAZARDS**

(H)/INGREDIENT(S)	CAS NUMBER	OSHA HAZARD NON-HAZARD (NH)	PERCENT
Malathion	121-75-5	H	56.8%
Xylene	1330-20-7	H	1.05%
Formulation Aids:		NH	42.15%

	NFPA ^{1/}	HMIS ^{2/}
HEALTH	2	2
FIRE	2	2
REACTIVITY	0	0

1/ National Fire Protection Association Rating

2/ Hazardous Materials Identification System

(4 = Extreme/Severe 3 = High/Serious 2 = Moderate 1 = Slight 0 = Minimum)

SARA TITLE III HAZARD CLASSIFICATION

IMMEDIATE (ACUTE) HEALTH	Yes
DELAYED (CHRONIC) HEALTH	Yes
FIRE	Yes
SUDDEN RELEASE OF PRESSURE	No
REACTIVE	No

III. PHYSICAL DATA

SPECIFIC GRAVITY: 1.056
BOILING POINT: Not determined
FREEZING POINT: Not determined
VAPOR PRESSURE: Not determined
SOLUBILITY IN WATER: 100%
APPEARANCE: Amber, clear liquid
ODOR: Mild sulfurous odor.

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 105°F (PMCC)
FLAMMABLE LIMITS IN AIR: Not determined
AUTOIGNITION TEMPERATURE: Not determined
EXTINGUISHING MEDIA: Use carbon dioxide or dry chemical for small fires and water fog or foam (alcohol, polymer or ordinary) for large fires. Water stream may spread flames.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Noxious fumes may be emitted under fire conditions.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should use self contained breathing apparatus and full turnout gear. Prevent runoff of fire water. Avoid exposure to smoke.

V. REACTIVITY DATA

STABILITY: Stable under normal conditions.
CONDITIONS TO AVOID: High temperatures.
MATERIALS TO AVOID: Bases and caustic solutions. Degrades slowly in water.
HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen sulfide, isomalathion, mercaptans, oxides of nitrogen, carbon, sulfur and phosphorus.
HAZARDOUS POLYMERIZATION: Will not occur

VI. HEALTH HAZARD DATA/FIRST AID PROCEDURES

TOXICOLOGY DATA:
Acute Oral LD₅₀ (rat): 5500 mg/kg
Acute Dermal LD₅₀ (rabbit): 2000 mg/kg
Acute Inhalation (4 hr rat): > 5.2 mg/L
Eye Irritation (rabbit): Irritant
Dermal Irritation (rabbit): Mild irritant
Dermal Sensitization: Not determined

EXPOSURE LIMITS:

CHEMICAL NAME(S)	ACGIH (TLV)	OSHA (TWA)
Malathion	10 mg/m ³	15 mg/m ³
Xylene	100 ppm	100 ppm

CARCINOGENICITY, TERATOGENICITY, MUTAGENICITY: Not listed as a carcinogen by NRC, IARC or OSHA

SIGNS OF POISONING: Headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of nose and mouth, muscle spasms.

PRIMARY ROUTES OF ENTRY: Ingestion, skin contact, inhalation

EFFECTS OF SINGLE OVEREXPOSURE:

Swallowing: May cause headaches, nausea, vomiting, cramps, weakness.

Skin Absorption: May cause headaches, nausea, vomiting, cramps, weakness and skin irritation.

Inhalation: May cause headaches, nausea, vomiting, cramps, weakness and irritation of the respiratory tract.

Eyes: May cause eye irritation.

EFFECTS OF REPEATED OVEREXPOSURE: Repeated or prolonged overexposure may cause headache, nausea, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, labored breathing, nervousness, sweating, watering of eyes, drooling or frothing of nose and mouth, muscle spasms, skin, eye or respiratory tract irritation.

OTHER EFFECTS OF OVEREXPOSURE: See Notes to Physician

EXISTING MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate preexisting skin conditions. Inhalation of mists may aggravate preexisting respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES:

Swallowing: Call physician or poison control center. If patient is alert and not convulsing give 1 - 2 glasses of water and induce vomiting by tickling the back of the throat or administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious person.

Skin: Wash affected area with plenty of soap and water. Remove contaminated clothing. Launder contaminated clothing separately. Get medical attention if irritation develops and persists.

Inhalation: Remove victim to fresh air. If not breathing, administer artificial respiration. GET MEDICAL ATTENTION.

Eyes: Hold eyelids open and flush with a steady stream of water for at least 15 minutes. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN: Malathion is an acetyl cholinesterase inhibitor. Atropine is antidotal. Erythrocyte cholinesterase activity should be measured. This product contains petroleum distillates, evacuate stomach using a cuffed endotracheal tube, taking care to avoid aspiration of the stomach contents.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Dike the area using absorbent or materials such as sand or clay. Recover and contain as much product as possible using absorbent. Clean spill area using a solution of water and detergent. Collect and contain wash water and all contaminated absorbent for disposal. If spilled on the ground, the affected area should be excavated to a depth of 1 - 2 inches. Prevent the spilled product or washings from reaching public sewers or waterways. Wear appropriate protective equipment during the cleanup. Ensure that tools and equipment are adequately decontaminated.

WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

CONTAINER DISPOSAL: Dispose of in an approved facility according to federal, state and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Store in a cool, dry, secure area away from sources of heat or ignition.

VIII. SPECIAL PROTECTION INFORMATION

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product.
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills.
- Any other activity that may result in hazardous exposures.
- Refer to product label for PPE required for labeled use.

RESPIRATORY PROTECTION: Use NIOSH/MSHA approved respirator for organic vapors. Use positive pressure contained breathing apparatus where emergency conditions or where exposure limits are exceeded..

VENTILATION: Local exhaust

PROTECTIVE CLOTHING: Chemical resistant gloves, coveralls, apron and foot coverings.

EYE PROTECTION: Safety goggles

USER SAFETY RECOMMENDATIONS: Safety showers and eye wash should be easily accessible.

IX. REGULATORY STATUS

TSCA INVENTORY STATUS:

TRANSPORTATION STATUS:

DOT INFORMATION:

Container Capacity	Proper Shipping Name	Hazard Class	Label	Packing Group
Greater than 20 gallons	RQ, Combustible liquid, N.O.S. (contains malathion and xylene), NA 1993	Combustible liquid	Greater than 119 gallons requires a combustible (3) placard	III

SARA TITLE III

Section 302-304 (40 CFR 350):

Extremely Hazardous Substance (EHS): Not listed

Section 312, Reporting (40 CFR 370):

SARA/OSHA Hazardous Chemical Reporting Quantity: 10,000 pounds.

Section 313, Toxic Chemicals: Malathion, Xylene

Reportable Quantity (RQ): Malathion - 10 lbs Xylene - 100 lbs

RCRA HAZARDOUS WASTE: Not listed (may be characteristic waste)

International Right-To-Know Regulations:

X. REFERENCES

- 1) Supplier sponsored studies.

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH,
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