



MATERIAL SAFETY DATA SHEET

Date stamp: 20-Mar-2008

MSDS Ref. No.: 016421025-1

Revision Number: 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: ORTHO Malathion Plus Insect Spray Concentrate
Description: Insecticide

Company
The Scotts Company LLC
14111 Scottslawn Road
Marysville, OH 43041

24-HOUR EMERGENCY TELEPHONE NUMBERS:
CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-937-644-0011

EPA Registration No.: 239-739
Formula No.: S1992

2. HAZARDS IDENTIFICATION

Labelling

Signal word: Warning

Precautionary Statements

Causes substantial but temporary eye injury. Do not get in eyes. May be harmful if swallowed or absorbed through the skin. Avoid contact with eyes, skin, and clothing. Keep out of reach of children.

Potential health effects

Eye contact: Moderately irritating to the eyes.

Skin contact: Moderately irritating to the skin.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Also toxic if swallowed.

Inhalation: Harmful by inhalation. May cause irritation of respiratory tract.

Aggravated Medical Conditions: Inhalation may aggravate asthma.

Properties affecting health: Cholinesterase inhibition.

Principle routes of exposure: Skin, Eyes, Inhalation

Target organ effects: Irritation. Nervous system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No	Weight %
Malathion	121-75-5	50
Inert Ingredients	PROPRIETARY	50

4. FIRST AID MEASURES

Eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice

Skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice

Notes to physician: Contains a cholinesterase inhibitor; atropine sulfate and protopam (2-PAM) are antidotal, but 2-PAM should not be used alone. Aspiration may cause pulmonary oedema and pneumonitis.

Protection of first-aiders: Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable properties: Flammable liquid.

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Suitable extinguishing media: Water spray, carbon dioxide, dry chemical, chemical foam.
Explosion potential: May form explosive vapor-air mixtures above flash point.
Explosive properties: Explosive vapor could form.
Hazardous combustion products: Toxic fumes may be produced.
Specific hazards: Risk of ignition.
Fire fighting procedures: Select appropriate method to surround and extinguish fire. Flood with water to cool containers.
Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear personal protective equipment
Environmental precautions: Prevent product from entering drains
Methods for containment: Extinguish all ignition sources. Control spill with dykes and absorb with inert absorbant material.
Methods for cleaning up: Detergent and water.

7. HANDLING AND STORAGE

Handling: Do not use near an ignition source. Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not contaminate water sources when disposing of equipment wash waters.

Storage: Store in original container in a safe place. Do not put concentrate or dilute into food or drink containers. Store away from heat or open flame. Do not store diluted spray. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components	ACGIH:	OSHA:
Malathion	1 mg/m ³ TWA	15 mg/m ³ TWA total

Engineering controls Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard

Personal Protective Equipment

Eye/face protection Safety glasses with side shields or goggles.
Skin and body protection: Wear suitable protective clothing if contact is anticipated during manufacturing. Chemical resistant gloves.
Respiratory protection: If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.

General hygiene considerations: Wash hands before breaks and immediately after handling the product
Re-entry Interval: When dry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid	Color: Amber
Bulk density: 6.9 lbs/gal 106 F	Flash point: 104° F
Method: Flame extension	pH: 5.0 - 8.0
Solubility: Miscible	

10. STABILITY AND REACTIVITY

Chemically Stable: Yes
Conditions to avoid: Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid: Avoid contact with other chemicals . Strong acids and oxidising agents.
Hazardous decomposition products: Toxic fumes and gases may be generated.
Possibility of hazardous reactions: Poses little or no immediate hazard.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50/oral: 2.13-2.31 g/kg, rat

LD50/dermal: >2.0 g/kg, rabbit
LC50/inhalation: >5.0 mg/L, (vapor), rat
Eye effects: Moderate eye irritation, rabbit
Skin effects: Moderate skin irritation, rabbit
Sensitization: No information available

Chronic toxicity

Carcinogenic effects: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Components	NTP:	IARC:	OSHA:
Malathion	Not listed	3	Not listed

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea . Toxic if swallowed.
Inhalation: May cause irritation of respiratory tract. Organophosphorous pesticide : cholinesterase inhibitor, neurologic and respiratory toxicity.
Target organ effects: Irritation. Nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects: Extremely toxic to fish and aquatic invertebrates. Highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply or allow drift to blooming crops or weeds if bees are visiting treatment area.
Persistence and degradability: Inherently biodegradable.
Bioaccumulative potential: Does not bioaccumulate.
Mobility: Water contaminating.
Aquatic toxicity: Toxic to fish and other water organisms.
Additional ecological information: Do not contaminate water sources when disposing of equipment washwaters. Do not apply directly to lakes, streams, or ponds.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: If partially filled, call the local solid waste agency for disposal instructions. Do not place product down any indoor or outdoor drain.
Contaminated packaging: If empty, place in trash or offer for recycling if available.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT

Proper shipping name: Not DOT regulated
Reportable Quantity (RQ): 100 lbs Malathion

Other Shipping Information: UN1993, Flammable liquids, n.o.s., (Xylene), 3, III, MP (malathion), for vessel transport. UN1993, Flammable liquids, n.o.s., (xylene), 3, III, for air transport.

15. REGULATORY INFORMATION

Components	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Malathion	121-75-5	100 lb final RQ 45.4 kg final RQ	Not Listed

General Information Contact local authorities for disposal of large quantities of product

16. OTHER INFORMATION

NFPA: Health: 2 Flammability: 3 Reactivity: 0
HMIS: Health: 2 Flammability: 3 Reactivity: 0

Hazard Rating: 0=Least; 1-Slight; 2=Moderate; 3=High; 4=Severe

EPA FIFRA Comment: Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved product label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

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