

Safety Data Sheet
Wilson 50% Malathion
Insecticide Concentrate



1. Identification

Product identifier	Wilson 50% Malathion Insecticide Concentrate
Product code	7302810
Registration number	9802
Other means of identification	059-3757-4.
Recommended use of the chemical and restrictions on use	Insecticide (Organophosphate).
Manufacturer	Premier Tech Home & Garden Inc 1, avenue Premier Rivière-du-Loup (Quebec) G5R 6C1 CANADA Tel. (418) 863-7878 www.pthomeandgarden.com
Emergency phone number	1-800-268-2806

2. Hazard identification

Summary	This product is not regulated according to the Canadian Hazardous Products Act (HPA) and Hazardous Products Regulations (HPR) SOR/2015-17 (or WHMIS 2015). KEEP OUT OF REACH OF CHILDREN. Combustible liquid. Keep away from heat, sparks and open flame. Avoid contact with skin, eyes and clothing. Do not breathe vapors. Do not ingest. If medical advice is needed, have this SDS or label at hand. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.
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WHMIS 2015/GHS/OSHA HCS 2012



Not Regulated under WHMIS 2015

Flammable liquids (Category 4)
 Acute toxicity, oral (Category 4)
 Serious eye damage/eye irritation (Category 1)
 Skin sensitizer (Category 1)
 Carcinogenicity (Category 1B)
 Aspiration hazard (Category 1)

DANGER

- H227: Combustible liquid
- H318: Causes serious eye damage
- H350: May cause cancer
- H304: May be fatal if swallowed and enters airways
- H302: Harmful if swallowed
- H317: May cause an allergic skin reaction
- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P210: Keep away from heat, sparks, open flames and other ignition sources. No smoking.
- P261: Avoid breathing vapours, mist and spray.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.
 P280: Wear protective gloves, protective clothing and eye protection.
 P308+313: IF exposed or concerned: Get medical attention.
 P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting.
 P302+352: IF ON SKIN: Wash with plenty of water and soap.
 P333+313: If skin irritation or a rash occurs: Get medical advice or attention.
 P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P310: Immediately call a physician.
 P362+364: Take off contaminated clothing and wash before reuse.
 P370+378: In case of fire: Use chemical foam, dry chemical or carbon dioxide to extinguish.
 P403: Store in a well-ventilated place.
 P405: Store locked up.
 P501: Dispose of contents and container to a licensed chemical disposal agency in accordance with local, regional and national regulations.

3. Composition/information on ingredients

Common name	CAS	Weight % content
Malathion	121-75-5	30 - 60 %
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5	30 - 60 %

Note: The manufacturer withholds the actual concentration range of the ingredient as a trade secret. Contains Surfactant 1 (complex mixture, 1-5%) that has the following hazard classes: Flammable liquids (Category 3), Acute toxicity, oral (Category 4), Skin corrosion/irritation (Category 2), Serious eye damage/eye irritation (Category 1), Carcinogenicity (Category 2), Specific target organ toxicity, single exposure (Category 3). Contains Surfactant 2 (complex mixture, 1-5%) that has the following hazard classes: Flammable liquids (Category 3), Acute toxicity, oral (Category 4), Acute toxicity, inhalation (Category 2), Skin corrosion/irritation (Category 2), Serious eye damage/eye irritation (Category 1), Carcinogenicity (Category 2)

4. First-aid measures

Inhalation	Move person to fresh air. If breathing is difficult, give oxygen by trained personnel. If not breathing, give artificial respiration. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention.
Eye contact	Flush with water for at least 15 minutes. Remove contact lenses if easy to do. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT INDUCE VOMITING! If victim is conscious wash out mouth with plenty of water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	May cause severe eye irritation or eye damage. May cause an allergic reaction of the skin. Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.
Notes to the physician	If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemicals, chemical foam, carbon dioxide (CO ₂). Do not use a heavy water jet.
Specific hazards arising from the chemical	Combustible liquid and vapours. In a fire or if heated, a pressure increase will occur and the container may burst.

Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures


Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry into sewers, closed areas and release to the environment. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Remove sources of ignition. Ventilate the area well. Stop leak, if it's possible to do so without risk. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Use non-sparking and antistatic tools. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Precautions for safe handling	KEEP OUT OF REACH OF CHILDREN. Keep away from heat, sparks and open flame. Use non-sparking and antistatic tools. Use only in well ventilated area. Avoid contact with skin, eyes and clothing. Do not breathe vapours, mists or aerosols. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. Wash hands, forearms and face thoroughly after handling this compound and before eating, drinking or using toiletries. Remove contaminated clothing and wash before reuse.
Conditions for safe storage, including any incompatibilities	Storage and handling should follow the NFPA 30 Flammable and/or Combustible Liquids Code and the National Fire Code of Canada (NFCC). Store tightly closed and in properly labelled containers in a cool, dry and well ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from oxidizing materials and incompatible materials (see section 10). Keep away from direct sunlight and heat.
Storage temperature	5 to 40°C (41 to 104°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	Malathion: 250 mg/m ³				
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	TWA (8h)		400 ppm	1600 mg/m ³	NIOSH
Malathion	TWA (8h)	Inhalable Fraction		1 mg/m ³	ACGIH , BC, ON
		Total Dust		10 mg/m ³	RSST (Pc)
Appropriate engineering controls	Provide sufficient mechanical ventilation (general or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.				
Individual protection measures					
Eye	Wear safety glasses with side shields. If there is a risk of contact with eyes, wear chemical splash goggles.				
Hands	Wear nitrile or neoprene gloves. Disposable nitrile gloves can also be used, but discard after single use.				
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. If necessary, wear an apron or long-sleeve protective coverall suit.				

Respiratory	Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA.
Feet	Wear rubber boots to clean up a spill.
	
Goggles Nitrile gloves	

9. Physical and chemical properties

Physical state	Liquid	Flammability	Combustible
Colour	Amber	Flammability limits	1 to 7%
Odour	Solvent	Flash point	65°C (149°F) Tagliabue closed cup
Odour threshold	N/Av.	Auto-ignition temperature	510°C (950°F)
pH	N/Av.	Sensibility to electrostatic charges	N/Av.
Melting point	-30°C (-22°F)	Sensibility to sparks and/or friction	N/Av.
Freezing point	-30°C (-22°F)	Vapour density	N/Av. (Air = 1)
Boiling point	177 to 210°C (350.6 to 410°F)	Relative density	N/Av. (Water = 1)
Solubility	Soluble in water.	Partition coefficient n-octanol/water	N/Av.
Evaporation rate	N/Av.	Decomposition temperature	100°C (212°F)
Vapour pressure	N/Av.	Viscosity	N/Av.
Percent Wt. Volatile	N/Av.	Molecular mass	N/Av.
VOC (g/L)	N/Av.	% Volume Volatile (VOC)	N/Av.
VOC (lb/gal)	N/Av.	% Wt. Volatile (VOC)	N/Av.
N/Av.: Not Available N/Av.: Not Applicable Und.: Undetermined N/E: Not Established			

10. Stability and reactivity

Reactivity	No reaction expected.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	A dangerous reaction will not occur.
Conditions to avoid	Avoid heat, flame and sparks. Avoid contact with incompatible materials.
Incompatible materials	Strong oxidizing agents (e.g. chlorine, fluorine, nitric acid, perchloric acid, peroxides, nitrates, chlorates, chromates, permanganates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Numerical measures of toxicity	Malathion	Ingestion	646 mg/kg	Rat	LD50
		Inhalation	>5.2 mg/l/4h	Rat	LC50
		Skin	8790 mg/kg	Rabbit	LD50
	Solvent naphtha (petroleum), heavy aromatic (C9-C16)	Ingestion	7050 mg/kg	Rat	LD50
		Inhalation	>5.2 mg/l/4h	Rat	LC50
		Skin	>2000 mg/kg	Rat	LD50
Likely routes of exposure	Skin, eyes, inhalation, ingestion.				
Delayed, immediate and chronic effects	Eye contact	May cause severe eye irritation or eye damage.			
	Skin contact	Prolonged and repeated contact may cause skin dryness and irritation.			
	Inhalation	Prolonged or excessive exposure may cause headache, drowsiness, nausea, dizziness, respiratory tract irritation.			
	Ingestion	Harmful if swallowed. Ingestion can cause abdominal pain, nausea, cramps, headache, dizziness, drowsiness and vomiting. Harmful or fatal if inhaled into the lungs (ingestion/vomiting). Can enter lungs and cause damage. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking and gagging are often noted at the time of aspiration.			
	Respiratory or skin sensitization	May cause an allergic reaction of the skin. Malathion (CAS no 121-75-5) may cause sensitization by skin contact. This product is not a respiratory sensitizer.			
	IARC/NTP Classification	Common name IARC NTP Malathion 2A -			
	Carcinogenicity	IARC : 1- Carcinogenic; 2A- Probably carcinogenic; 2B- Possibly carcinogenic. NTP : K- Known to be carcinogens; R- Reasonably anticipated to be carcinogens. Malathion (CAS no 121-75-5) is probably carcinogenic to humans (Group 2A, IARC, 2017). The risk of cancer depends on duration and level of exposure.			
	Mutagenicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.			
	Reproductive toxicity	Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.			
	Specific target organ toxicity - single exposure	No target organ is listed.			
	Specific target organ toxicity - repeated exposure	No target organ is listed.			
Interactive effects	No information available for this product.				
Other information	Malathion (CAS No. 121-75-5) causes a weak inhibition of cholinesterases, enzymes which participate in the functioning of the central and peripheral nervous system. A dose between 500 and 1000 mg / kg is potentially fatal to humans. The oral acute toxicity estimate (ATE) of the mixture was calculated to be greater than 300 mg/Kg but lower than 2000 mg/kg. This value is classified according to GHS: Acute toxicity, oral (Category 4).				

12. Ecological information


Ecological toxicity	Fish - Bluegill (<i>Lepomis macrochirus</i>), fresh water	LC50	0.046 mg/L; 96 h (CAS no 121-75-5)
	Crustacea - Water Flea (<i>Daphnia magna</i>)	EC50	0.002 mg/L; 48 h (CAS no 121-75-5)
	Algae, <i>Pseudokirchneriella subcapitata</i>	EC50	4.06 mg/L; 72 h (CAS no 121-75-5)

	Bee	LD50	0.00020 mg/Bee-Abeille (CAS no 121-75-5)
	Fish - Oncorhynchus mykiss - Rainbow trout	LC50	2.34 mg/L; 96 h (CAS no 64742-94-5)
	Aquatic Invertebrate - Daphnia magna	EC50	0.95 mg/L; 48 h (CAS no 64742-94-5)
Persistence	Contains an or many ingredients that may be persistent in aquatic environment.		
Degradability	Distillates (Petroleum), hydrotreated light (CAS no 64742-47-8) are readily biodegradable with a result of >60% in 14 days (OECD 301F).		
Bioaccumulative potential	The product is a mixture of which some ingredients have a low bioaccumulation potential (Log Kow of <3 and / or BCF <500) while other ingredients have some potential to bioaccumulate (Log Kow of >3 and / or BCF >500).		
Mobility in soil	The product is a mixture of which some ingredients evaporate very easily from the surface of the soil. Moreover, some ingredients have very high mobility in soil, while other ingredients have moderate to low mobility in soil.		
Other adverse effects	Toxic to birds and aquatic organisms. Highly toxic to fish and bees. This chemical does not deplete the ozone layer.		

13. Disposal considerations

Container	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Residues and empty containers must be considered as hazardous waste. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.
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14. Transport information

UN Number	UN 3082
UN Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Malathion)
Environmental hazards	Contains marine pollutant.
Special precautions for user	Permit required for transportation with proper DANGER placards displayed on vehicle.
TDG - Transportation of Dangerous Goods (Canada & US DOT)	
Transport hazard class(es)	 <p>Class 9</p>
Packing group	III
2020 Emergency Response Guidebook	171
IMO/IMDG - International Maritime Transport	
Classification	UN 3082. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Malathion) Class 9, PG III. Emergency schedules (EmS-No) F-A, S-F
IATA - International Air Transport Association	
Classification	UN 3082. ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Malathion) Class 9, PG III.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.

15. Regulatory information

PEST CONTROL PRODUCT

There are Canada-specific environmental requirements for handling, use and disposal of this pest control product that are indicated on the product label.

RHazardous Products Regulations Information:

This product has been classified in accordance with the amended Hazardous Products Act (HPA) and the Hazard Criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

Hazardous Products Act Information:

Pest control products, as defined in subsection 2(1) of the Pest Control Products Act (PCPA), are excluded from the application of the Hazardous Products Act (that is, pest control products are exempt from the supplier labelling and SDS requirements of the Hazardous Products Act and Regulations). This product has been voluntarily classified according to the WHMIS 2015 standard.

Pest Control Products Act Registration Number: 9802



Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:

DANGER. POISON.
 READ THE LABEL AND CARTON BEFORE USING.
 KEEP OUT OF REACH OF CHILDREN.

Difference between SDS and pesticide label

PCPA Label		WHMIS 2015/SGH SDS	
Symbol(s)		Pictogram(s)	 Not Regulated under WHMIS 2015
Caution word	Danger Poison	Signal Word	DANGER
Hazard Statement	Not applicable.	Hazard Statement	H227: Combustible liquid H318: Causes serious eye damage H350: May cause cancer H304: May be fatal if swallowed and enters airways H302: Harmful if swallowed H317: May cause an allergic skin reaction

CANADA

Common name	CAS	CEPA	DSL	NDSL	NPRI
Malathion	121-75-5		X		
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5	X	X		X

- CEPA: List of Toxic Substances Managed Under Canadian Environmental Protection Act
- DSL: Domestic Substances List Inventory
- NDSL: Non-Domestic Substances List Inventory
- NPRI: National Pollutant Release Inventory Substances

UNITED STATE OF AMERICA


Common name	CAS	TSCA	CER CLA	EPCRA 313	EPCRA 302/304	CAA 112(b) HON	CAA 112(b) HAP	CAA 112(r)	CWA 311	CWA Prio.
Malathion	121-75-5		X	X						
Solvent naphtha (petroleum), heavy aromatic (C9-C16)	64742-94-5	X								

- TSCA: Toxic Substance Control Act
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act list of hazardous substances
- EPCRA 313: Emergency Planning and Community Right-to-Know Act, Section 313 Toxic Chemicals
- EPCRA 302/304: Emergency Planning and Community Right-to-Know Act, Section 302/304 Extremely Hazardous Substances
- CAA 112(b) HON: Clean Air Act - Hazardous Organic National Emission Standard for Hazardous Air Pollutant
- CAA 112(b) HAP: Clean Air Act - Hazardous Air Pollutants lists pollutants
- CAA 112(r): Clean Air Act - Regulated Chemicals for Accidental Release Prevention
- CWA 311: Clean Water Act - List of Hazardous Substances
- CWA Priority: Clean Water Act - Priority Pollutant list


California Proposition 65

Common name	CAS	Cancer	Reproductive and Developmental Toxicity
Malathion	121-75-5	X	

Other regulations

<p>HMIS</p> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <input type="radio"/> Health </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <input type="radio"/> Flamability </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <input type="radio"/> Reactivity </div> <div style="display: flex; align-items: center;"> <input type="radio"/> Protective Equipment </div> </div>	<p>NFPA</p> 
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16. Other information

Date (YYYY-MM-DD)	Premier Tech Home & Garden Inc 2021-11-21
Version	01
Other information	<p>REFERENCES:</p> <ul style="list-style-type: none"> - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, https://haz-map.com/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), https://www.cnesst.gouv.qc.ca/fr - TOXNET Databases, Toxicology Data Network, NIH U.S. National Library of Medicine, http://toxnet.nlm.nih.gov/ - The National Center for Biotechnology Information, National Institutes of Health (NIH), U.S. National Library of Medicine, https://pubchem.ncbi.nlm.nih.gov - SAgE Pesticides, CRAAQ, Effets toxiques des matières actives, https://www.sagepesticides.qc.ca/Recherche/RechercheMatiere <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System</p>
<p>Powered by</p>  <p>A global vision of prevention</p>	<p>To the best of our knowledge, the information contained herein is accurate. However, neither Preventis System, nor the above named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.</p>