

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name DAVID GRAYS MALATHION GARDEN SPRAY
Synonyms 9551 (6X500ML), 9445 (12X200ML(- MANUFACTURER'S CODE • MALATHION INSECTICIDE

1.2 Uses and uses advised against

Uses INSECTICIDE

1.3 Details of the supplier of the product

Supplier name DAVID GRAY & CO PTY LIMITED
Address 2 Rawlinson St, O'Connor, WA, 6961, AUSTRALIA
Telephone (08) 9337 4933
Fax (08) 9337 8316
Email general@davidgray.com.au
Website <http://www.davidgray.com.au>

1.4 Emergency telephone numbers

Emergency (08) 9337 4933 (B/H)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

Physical Hazards

Flammable Liquids: Category 4

Health Hazards

Aspiration Hazard: Category 1
Acute Toxicity: Skin: Category 4
Skin Sensitisation: Category 1
Acute Toxicity: Inhalation: Category 4

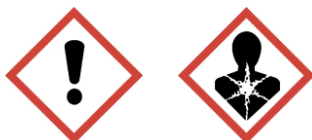
Environmental Hazards

Not classified as an Environmental Hazard

2.2 GHS Label elements

Signal word DANGER

Pictograms



Hazard statements

H227 Combustible liquid.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.

PRODUCT NAME DAVID GRAYS FRUIT FLY**Prevention statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statements

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment is advised - see first aid instructions.
P331 Do NOT induce vomiting.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use appropriate media for extinction.

Storage statements

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal statements

P501 Dispose of contents/container in accordance with relevant regulations.

2.3 Other hazards

No information provided.

3. COMPOSITION/ INFORMATION ON INGREDIENTS**3.1 Substances / Mixtures**

| Ingredient | CAS Number | EC Number | Content |
|---|------------|-----------|---------------|
| SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC | 64742-94-5 | 265-198-5 | 30 to 60% |
| MALATHION | 121-75-5 | 204-497-7 | 45-55% |
| ADDITIVE(S) | - | - | Not Available |

4. FIRST AID MEASURES**4.1 Description of first aid measures**

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. If poisoning occurs, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or doctor. Apply artificial respiration if not breathing.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If poisoned by skin absorption or through lungs, remove any contaminated clothing, wash skin thoroughly. If swallowed, do not induce vomiting. Give a drink of water. Get to a doctor or hospital quickly.

First aid facilities Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms are typical of cholinesterase inhibition. These include weakness, headache, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhoea, abdominal cramps and tightness in chest. In extreme cases unconsciousness, convulsions, severe respiratory depression and death may occur.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

PRODUCT NAME DAVID GRAYS FRUIT FLY

5.1 Extinguishing media

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

5.2 Special hazards arising from the substance or mixture

Combustible. May evolve toxic gases (phosphorus/ carbon/ sulphur oxides, sulphides, hydrocarbons) when heated to decomposition.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

5.4 Hazchem code

None allocated.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection systems. Store as a Class C1 Combustible Liquid (AS1940).

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

| Ingredient | Reference | TWA | | STEL | |
|------------------|-----------|-----|-------------------|------|-------------------|
| | | ppm | mg/m ³ | ppm | mg/m ³ |
| Malathion | SWA [AUS] | -- | 10 | -- | -- |
| Mineral Oil Mist | SWA [AUS] | -- | 5 | -- | -- |

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Biological limits

| Ingredient | Determinant | Sampling Time | BEI |
|------------|---|---------------|---------------------------------------|
| MALATHION | Acetylcholinesterase activity in red blood cells | End of shift | 70% of individual's baseline activity |
| | Butyrylcholinesterase activity in serum or plasma | End of shift | 60% of individual's baseline activity |

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

PPE

- Eye / Face** Wear splash-proof goggles.
- Hands** Wear PVC or nitrile gloves.
- Body** Wear coveralls and rubber boots.
- Respiratory** Wear a Type A (Organic vapour) respirator. If spraying, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---------------------------|----------------------|
| Appearance | CLEAR PALE YELLOW |
| Odour | PUNGENT ODOUR |
| Flammability | CLASS C1 COMBUSTIBLE |
| Flash point | > 62°C (Solvent) |
| Boiling point | 178°C (Solvent) |
| Melting point | NOT AVAILABLE |
| Evaporation rate | NOT AVAILABLE |
| pH | NOT AVAILABLE |
| Vapour density | NOT AVAILABLE |
| Specific gravity | 1.00 – 1.06 |
| Solubility (water) | EMULSIFIES |
| Vapour pressure | NOT AVAILABLE |
| Upper explosion limit | NOT AVAILABLE |
| Lower explosion limit | NOT AVAILABLE |
| Partition coefficient | NOT AVAILABLE |
| Autoignition temperature | NOT AVAILABLE |
| Decomposition temperature | NOT AVAILABLE |
| Viscosity | NOT AVAILABLE |
| Explosive properties | NOT AVAILABLE |
| Oxidising properties | NOT AVAILABLE |
| Odour threshold | NOT AVAILABLE |

10. STABILITY AND REACTIVITY

10.1 Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases (phosphorus/ carbon/ sulphur oxides, sulphides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed or if inhaled.

Information available for the ingredients:

| Ingredient | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|--------------------|--------------------|--|
| SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC | > 2000 mg/kg (rat) | > 2000 mg/kg (rat) | > 590 mg/m ³ /4 hours (rat) |
| MALATHION | 190 mg/kg (mouse) | 2330 mg/kg (mouse) | 43790 ug/m ³ /4hrs (rat) |
| DISTILLATES (PETROLEUM), SOLVENT REFINED LIGHT PARAFFINIC (<3% DMSO EXTRACT) | > 15 g/kg (rat) | > 5 g/kg (rabbit) | -- |

| | |
|---------------------------------|--|
| Skin | Contact may result in irritation, redness, pain and rash. |
| Eye | Contact may result in irritation, lacrimation, pain, redness and blurring or dimness of vision. |
| Sensitisation | May cause an allergic skin reaction. This product is not classified as a respiratory sensitiser. |
| Mutagenicity | Not classified as a mutagen. |
| Carcinogenicity | There is limited evidence in humans for the carcinogenicity of malathion. Positive associations have been observed with non-Hodgkin lymphoma and cancer of the prostate. There is sufficient evidence in experimental animals for the carcinogenicity of malathion. Malathion is probably carcinogenic to humans (IARC Group 2A). |
| Reproductive | Not classified as a reproductive toxin. |
| STOT - single exposure | Cholinesterase inhibitor resulting in the accumulation of acetylcholine, causing rapid twitching of voluntary muscles and finally paralysis. Over exposure may result in irritation of the nose and throat, coughing, weakness, nausea, headache, vomiting and mild chest pain. High level exposure may result in dizziness, incoordination, excessive salivation, sweating, and breathing difficulties. |
| STOT - repeated exposure | Not classified as causing organ damage from repeated exposure. However, repeated exposure to some solvents have been reported to cause adverse effects to the central nervous system (CNS). |
| Aspiration | Aspiration into the lungs may result in chemical pneumonitis and pulmonary oedema. |

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No information provided.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal For small amounts, absorb with sand, vermiculite or similar and dispose of to an approved landfill site. For larger amounts incinerate where available or; expose to ultraviolet light & moisture; or dilute with water, absorb with lime and dispose to approved landfill site. Triple wash containers with detergent (absorb waste with sand or similar), crush or perforate container to prevent reuse and dispose of, with wash residue to approved landfill site.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

| | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|-----------------------------|----------------------|----------------------------|-----------------------------|
| 14.1 UN Number | None allocated. | None allocated. | None allocated. |
| 14.2 Proper Shipping Name | None allocated. | None allocated. | None allocated. |
| 14.3 Transport hazard class | None allocated. | None allocated. | None allocated. |
| 14.4 Packing Group | None allocated. | None allocated. | None allocated. |

14.5 Environmental hazards

No information provided.

14.6 Special precautions for user

Hazchem code None allocated.

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison schedule Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Inventory listings **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS, or are exempt.

16. OTHER INFORMATION

Additional information ORGANOPHOSPHATES-CARBAMATE PESTICIDES-LARVICIDES: These agents act by combining with and inactivating the enzyme acetylcholinesterase (an enzyme involved in nerve muscle coordination). The inhibition of the cholinesterase appears to be reversible following cessation of exposure at sub lethal concentrations (acute exposure). The principal manifestations of poisoning with cholinesterase inhibitor pesticides are visual disturbances, respiratory difficulty and gastrointestinal hyperactivity.

RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

| | |
|-------------------|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| CAS # | Chemical Abstract Service number - used to uniquely identify chemical compounds |
| CNS | Central Nervous System |
| EC No. | EC No - European Community Number |
| EMS | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) |
| GHS | Globally Harmonized System |
| GTEPG | Group Text Emergency Procedure Guide |
| IARC | International Agency for Research on Cancer |
| LC50 | Lethal Concentration, 50% / Median Lethal Concentration |
| LD50 | Lethal Dose, 50% / Median Lethal Dose |
| mg/m ³ | Milligrams per Cubic Metre |
| OEL | Occupational Exposure Limit |
| pH | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm | Parts Per Million |
| STEL | Short-Term Exposure Limit |
| STOT-RE | Specific target organ toxicity (repeated exposure) |
| STOT-SE | Specific target organ toxicity (single exposure) |
| SUSMP | Standard for the Uniform Scheduling of Medicines and Poisons |
| SWA | Safe Work Australia |
| TLV | Threshold Limit Value |
| TWA | Time Weighted Average |

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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