

Garden King Rogor Garden Insect Spray RTU**Section 1 - Identification of Chemical Product and Company**

Envirogreen Pty Ltd
PO Box 6390
Silverwater NSW 1811

Phone: (02) 9395 1200 (Business hours)
Fax: (02) 9395 1241

Trade Name: Garden King Rogor RTU
Product Use: Systemic insecticide for garden use in RTU aerosol
Creation Date: December, 2002
Revision Date: June 2008

Section 2 - Hazards Identification**Statement of Hazardous Nature**

This product is NOT classified as hazardous according to the criteria of ASCC.
Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: n/a at this concentration

Safety Phrases: n/a at this concentration

SUSDP Classification: S6.

ADG Classification: 2.1 Flammable gas

Packaging Group: None Allocated

UN Number: 1950

Hazchem Code: None allocated

Emergency Overview

Physical Description & colour: Clear, almost colourless liquid

Odour: Characteristic odour.

Major Health Hazards: Actual concentration of dimethoate in aerosol is quite small. However, acute overexposure to organophosphates degrades acetylcholinesterase in the tissues. This typically leads to headache, dizziness, weakness, shaking, nausea, stomach cramps, diarrhoea and sweating. May be a cumulative poison; repeated exposures may reduce cholinesterase levels to potentially lethal levels.

Potential Health Effects

Inhalation: Data suggests that this product should present no significant problems to typical persons if used as intended.

Skin Contact: Data suggests that this product should present no significant problems to typical persons if used as intended.

Eye Contact: This product may irritate eyes. However, it is unlikely to cause any more than mild transient discomfort. It is also unlikely to cause any significant lasting effects.

Ingestion: Data suggests that this product is harmful if swallowed but unlikely due to nature of packaging (aerosol).

Carcinogen Status:

ASCC: No significant ingredient is classified as carcinogenic by ASCC.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m3)	STEL (mg/m3)
Dimethoate	60-51-5	0.3	not set	not set
Ethyl alcohol	64-17-5	65	1880	not set
Butane	106-97-8	35	1900	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

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The ASCC TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this MSDS with you when you call.

Ingestion: If swallowed, do NOT induce vomiting. Give a glass of water.

Inhalation: If vapours or mists have been inhaled, and irritation or unusual symptoms have developed, remove to fresh air and observe until recovered. If irritation or symptoms persists more than about 30 minutes, seek medical advice. See information above about poisoning treatment.

Skin Contact: If product gets on skin, wash skin to remove material. No further measures should normally be required.

Eye Contact: If product gets in eyes, wash material from them with running water. If they begin watering or reddening, take special care in washing thoroughly. No further measures should normally be required.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is a high risk of an explosion from this product if it is involved in a fire. Fire fighters should evacuate the area and take appropriate precautions.

Extinguishing Media: carbon dioxide, dry chemical, foam, and water fog

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered.

Flash point: Below 0°C

Upper Flammability Limit: 8.5%

Lower Flammability Limit: 1.9% (butane gas)

Auto ignition temperature: No data

Flammability Class: C1

Fire decomposition products: This product may form toxic and corrosive mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Oxides of phosphorus, water.

Section 6 - Accidental Release Measures

Accidental release: Minor spills do not normally need any special cleanup measures. A major spill is unlikely due to the nature of the packaging, however, in the event of a major spill, evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective chemically resistant clothing including facemask, face shield, gauntlets, and self-contained breathing apparatus. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite, or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, wash area-preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Do not puncture or incinerate aerosol cans. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Dispose of only in accord with all regulations.

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Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this MSDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: This product is a S6 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

ASCC Exposure limits	TWA (mg/m ³)	STEL (mg/m ³)	ADI (mg/Kg/day)	NOEL(mg/Kg/day)
Dimethoate	10	not set	0.02	0.2

ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2006.

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No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

Eye Protection: Eye protection is not normally necessary when this product is being used. However, if in doubt, wear suitable protective glasses or goggles.

Skin Protection: Protective gloves are not normally necessary when using this product. However, it is always prudent to wear gloves.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: If there is a significant chance of dusts, vapours, or mists accumulating in the area where this product is being used, a mask or respirator should be used. For help in selecting suitable equipment, consult AS/NZS 1715.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear, almost colourless liquid.
Odour:	Characteristic odour
Boiling Point:	No data
Melting Point:	n/a
Flash Point:	Below 0°C
Flammability Limits:	No data
Specific Gravity:	Approx 1
Water Solubility:	Soluble.
pH:	No data.
Volatility:	Completely volatile at 100°C
Evaporation Rate:	No data.
Auto ignition temp:	No data
Corrosiveness:	Not corrosive

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Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: Extreme heat, open flames

Incompatibilities: Strong oxidising agents

Fire Decomposition: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke, water.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Acute toxicity / Chronic toxicity

LD₅₀ Oral (Rat) = 2000-3000mg/kg LD₅₀ Dermal (Rat) = 8000mg/kg LC₅₀ Inhalation (4 hr, Rat) >0.2mg/L

For Dimethoate

Oral LD50 (rat): 185-680 mg/kg. (1)

Oral LD50 (mice): 135-165 mg/kg. (1)

Dermal LD50 (rat): 100-443 mg/kg. (1)

Inhalation LC50 (rat): > 1.6 mg/L/4hr. (2)

Skin Non-irritant (rabbit). (1)

Eyes: Non-irritant. (1)

Section 12 - Ecological Information

Avoid contaminating waterways.

Dimethoate

Aquatic Toxicity

Toxic to aquatic organisms.

96hr LC50 (rainbow trout): 6.2 mg/L.

96hr LC50 (mosquito fish): 40-60 mg/L.

96hr LC50 (bluegill sunfish): 6 mg/

4hr EC50 (Daphnia magna): 4.7 mg/L.

Risk of bioaccumulation in an aquatic species is low.

Terrestrial Toxicology

Oral LD50 (mallard duck): 40 mg/kg.

Oral LD50 (peasant): 15 mg/kg.

Oral LD50 (quail): 84 mg/kg.

Oral LD50 (chicken): 108 mg/kg.

Toxic to bees. Oral LD50 (bee): 0.1-0.2 ug/bee.

Contact LD50 (bee): 0.1-0.2 ug/bee.

Environmental Fate, Persistence & Degradation

Dimethoate is biodegradable. It undergoes rapid biodegradations in the environment and without problems in sewage treatment plants.

Section 13 - Disposal Considerations

Disposal: Disposal instructions appear on the product label and should be followed. Empty containers are usually discarded with household rubbish. Do not puncture or incinerate aerosol cans.

Section 14 - Transport Information

ADG Code: This product is classed as UN1950, Dangerous Goods Class 2.1 Flammable gases. Proper Shipping name is AEROSOLS. Class 2.1 Flammable gases shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 3 (Flammable Liquids) (where both flammable liquids and flammable gases are in bulk), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), and 7 (Radioactive Substances). They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.2 (Non-flammable Non-Toxic gases), 3 (Flammable liquids

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except where both flammable liquids and flammable gases are in bulk), 6 (Poisonous Substances), 8 (Corrosive Substances) 9 (Miscellaneous dangerous goods, Foodstuffs and foodstuff empties).

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with ASCC regulations.

Section 16 - Other Information

This MSDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
AICS	Australian Inventory of Chemical Substances
ASCC	Office Of The Australian Safety And Compensation Council
CAS number	Chemical Abstracts Service Registry Number
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program (USA)
SUSDP	Standard for the Uniform Scheduling of Drugs & Poisons
UN Number	United Nations Number

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This MSDS is prepared in accord with the ASCC document "National Code of Practice for the Preparation of Material Safety Data Sheets" 2nd Edition [NOHSC:2011(2003)]

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<http://www.kilford.com.au/> Phone (02)9251 4532

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