

Garden King Bug Kill Home & Garden Insect Spray

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 Bug Kill
Product Use: Ready to Use Aerosol controls common insect pests on indoor and outdoor plants
Creation Date: April 2004
Revision Date: June 2008

Section 2 - Hazards Identification

Statement of Hazardous Nature

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

Risk Phrases: n/a

Safety Phrases: n/a

SUSDP Classification: Not scheduled

ADG Classification: 2.1 Flammable Gases, **Sub Risk Class:** None allocated.

UN Number: 1950

Packaging Group: Not set

Emergency Overview

Physical Description & colour: Colourless to white liquid.

Odour: Mild odour.

Major Health Hazards: Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.

Potential Health Effects

Inhalation: Data suggests that this product should present no significant problems to typical persons in normal use. Available data indicates that this product is not harmful.

Skin Contact: Data suggests that this product should present no significant problems to typical persons in normal use.

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

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

Carcinogen Status:

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

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

IARC: Permethrin is Class 3 - unclassifiable as to carcinogenicity to humans.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Bioallethrin	584-79-2	0.37	not set	not set
Bioresmethrin	28434-01-7	0.07	not set	not set
Non hazardous liquid hydrocarbon	64356-06-6	12	not set	not set
Propane/butane hydrocarbon propellant	74-98-6/68527-19-5	40	not set	not set
Water	7732-18-5	46	not set	not set
Other non hazardous ingredients	secret	to 100	not set	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.

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.

MATERIAL SAFETY DATA SHEET

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.

If frostbite has occurred, immerse affected area in water that is neither hot or cold, but near body temperature (35-42°C). Do not allow injured area to warm up too rapidly as further injury may result.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed. No further measures should normally be required.

Eye Contact: If product gets into eyes, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

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

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is a slight risk of an explosion from this product if involved in a fire.

Unusual Fire & Explosion Hazards: This product is unlikely to decompose at temperatures normally achieved in a fire. Likely to decompose only after heating to dryness followed by further strong heating.

Decomposition Products: Fire decomposition may form toxic 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. Water.

Extinguishing Media: Carbon dioxide, water spray, dry powder, foam.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: No data

Upper Flammability Limit: No data

Lower Flammability Limit: No data

Auto ignition temperature: No data.

Flammability Class: Flammable Gas

Section 6 - Accidental Release Measures

Accidental release: Unlikely, due to the nature of container (aerosol) that a major spill could occur. However, In the event of a major spill, prevent spillage from entering drains or water courses. Wear protective clothing including eye/face protection. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, we recommend that you use a respirator. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel into labelled containers, and dispose of promptly. Do not puncture or incinerate aerosol cans. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label.

Section 7 - Handling and Storage

Handling: 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: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Keep from extreme heat and open flames and ensure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10.

MATERIAL SAFETY DATA SHEET

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)
Bioallethrin	not set	not set	not set	not set
Bioresmethrin	not set	not set	0.03	3

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 required but the use of protective glasses or goggles is recommended as a general precaution

Skin Protection: Not normally necessary

Respirator: Usually, no respirator is necessary when using this product.

Always wash hands before smoking, eating or using the toilet.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Colourless to white liquid
Odour:	Mild odour
Boiling point and vapour pressure:	Approximately 100°C at 100kPa.
Freezing/Melting Point:	No specific data. Liquid at normal temperatures.
Volatiles:	Completely volatile at 100°C
Flash Point:	No data
Specific Gravity:	0.737 (calculated)
Water Solubility:	Miscible
pH:	No data.
Volatility:	No data.
Auto ignition temp:	No data.
Corrosiveness:	Not corrosive.

Section 10 - Stability and Reactivity

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

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: Strong oxidising agents

Polymerisation: This product will not undergo polymerisation reactions.

Unusual Fire & Explosion Hazards: 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.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.

Section 11 - Toxicological Information

Acute toxicity:

Bioallethrin: In 1 yr feeding trials, rats receiving 2000 mg/kg diet showed no ill effects.

Bioresmethrin: LC50 (Inhalation): 5200 mg/m³/4 hours (rat); LD50 (Skin): 10 g/kg (rat); LD50 (Ingestion): 590 mg/kg (mouse) LD50 (Skin): 2500 ug/kg (rat); LD50 (Ingestion): 1000 mg/kg (mouse)

Chronic toxicity: No data

Reproductive, Teratogenic or Mutagenic effects:

Bioallethrin: When administered to ICR mice /at 15, 50 and 150 mg/kg/day/ during gestation /days 7-12/ to no significant adverse effects, such as abortion or resorption of the foetus or embryo, external or skeletal abnormalities of pups, or abnormalities in growth and organ differentiation, were observed at doses tested. Bioresmethrin: was tested for mutagenicity and/or chromosomal effects in several short-term test systems,

MATERIAL SAFETY DATA SHEET

such as Escherichia coli and Salmonella reverse mutation tests, primary DNA damage tests in eukaryotes and prokaryotes, and chromosomal effects in Chinese hamster cells or mouse bone marrow cells. Negative results were obtained with all tests.

Carcinogenic effects: Bioallethrin: No observable effects in trials on rats at doses up to 2000mg/Kg

Section 12 - Ecological Information

Environment This product is toxic to bees/fish and is only slightly toxic to pets and livestock. The active ingredients do not bioaccumulate in animal systems.

Effects on birds: Bioresmethrin: harmless for birds, (14-d LC50>5000)l.

Effects on aquatic organisms: Toxic to fish

Breakdown: The active ingredients breakdown in the environment by hydrolysis or oxidation in sunlight.

Section 13 - Disposal Considerations

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.

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 except where both flammable liquids and flammable gases are in bulk), 6 (Toxic 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 NICNAS regulations.

Permethrin is mentioned in the SUSDP.

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	Australian Safety And Compensation Council
CAS number	Chemical Abstracts Service Registry Number
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
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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