



Environmental Health Products  
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## MATERIAL SAFETY DATA SHEET

Date of preparation: July 2008

### BARMAC KILLMASTER INSECTICIDE

#### 1. **PRODUCT AND COMPANY IDENTIFICATION**

##### PRODUCT NAME

BARMAC KILLMASTER INSECTICIDE

##### RECOMMENDED USE

Ready-to-use slow release lacquer insecticide for control of cockroaches, spiders, silverfish and ants. May be used indoors and outdoors and will give 12 months control in most situations.

##### COMPANY IDENTIFICATION

Environmental Health Products,  
42 B Ellice Rd, Glenfield, Auckland  
Phone. +64 9 400 9994

##### EMERGENCY TELEPHONE NUMBER

Environmental Health Products      09 440 9994, 027 484 0464  
National Poisons Centre              0800 764 766

#### 2. **HAZARDS IDENTIFICATION**

##### HSNO CLASSIFICATION

3.1C, 6.1D, 6.3B, 6.4A, 6.5B, 6.7B, 6.9B, 9.1A, 9.2B, 9.3B, 9.4B

##### EYES

Will cause damage to eyes.

##### SKIN

Liquid will damage skin and is capable of causing skin reactions and dermatitis.

##### INHALED

Vapour is irritating to upper respiratory tract and lungs. Can cause coughing and headaches.

### 3. **COMPOSITION/INFORMATION ON INGREDIENTS**

#### **APPEARANCE**

Light gold coloured liquid with distinctive citrus odour.

<b>CHEMICAL ENTITY</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Chlorpyrifos	2921-88-2	2%
D-Limonene	5989-27-5	94.7%
Non Hazardous Ingredients		3.3%

### 4. **FIRST AID MEASURES**

#### **IF SWALLOWED**

- If the Person is Awake - Keep the person calm
- DO NOT give them anything to drink
- DO NOT make them vomit

Call the National Poisons Centre.

#### **If the Person is Having Difficulty Breathing**

- Keep the person calm
- Help the person into a position so that breathing is as easy as possible
- Quickly ring the emergency services telephone number to call an ambulance.

#### **If the Person is Sleepy or Unconscious**

- Check their pulse, ensure they are breathing and place them in the recovery position
- Lie the person on their side
- Ensure their head is lower than their body
- Quickly ring the emergency services telephone number to call an ambulance.

#### **IF BREATHED IN**

##### **If the Person is Awake**

- Protect yourself first
- Keep the person calm
- Remove them to fresh air and rest
- Do NOT give them anything to drink

**Call the National Poisons Centre.**

##### **If the Person is Having Difficulty Breathing**

- Protect yourself first
- Keep the person calm
- Remove them to fresh air and rest
- Help the person into a position so that breathing is as easy as possible

**Quickly ring the emergency services telephone number to call an ambulance.**

**If the Person is Sleepy or Unconscious**

- Protect yourself first
- Check person's pulse and breathing
- Place them in the recovery position
- Lie the person on their side and ensure their head is lower than their body

**Quickly ring the emergency services telephone number to call an ambulance.**

**IF ON THE SKIN**

- Remove any source of further contamination (such as contaminated clothing)
- Flush the affected area with water as soon as possible
- Continue to flush until all of the substance is removed
- Do NOT scrub the skin roughly
- Do NOT use any solvent (e.g. soap, acetone, mineral turpentine)

**Call the National Poisons Centre.**

**IF IN EYES**

- Flush the eye with running water for at least 15 minutes.
- If you have difficulty flushing the eye(s), go to your nearest Medical Centre or Hospital for help in flushing
- After flushing you will need to have a medical examination of the eye performed at a Medical Centre or Hospital to check for any damage.

**ADVICE TO DOCTOR**

- The active ingredient is in a relatively low concentration but is an anticholinesterase compound.
- Monitor cholinesterase levels and treat accordingly.
- Atropine by injection or Atrovent/ipratropium by airway puffs are the desirable antidotes.
- Oximes such as 2 PAM/Protopam may be therapeutic if used early but only in conjunction with atropine.
- The solvent has a low oral and dermal toxicity but can be highly irritating and cause reactions in some individuals.
- Treat these symptomatically.

**5. FIRE FIGHTING MEASURES**

- Avoid smoking, naked flames or other ignition sources.
- When fighting fires wear self contained breathing apparatus and full protective clothing.
- Use water to keep fire exposed containers cool.

**6. ACCIDENTAL RELEASE MEASURES****Spills and Disposal**

- Clean up all spills immediately.

- Control personnel contact by using protective equipment used during application.
- Contain and absorb onto vermiculite or similar materials and place in suitable container for disposal.
- Area to be washed down with water and detergent to remove remaining pesticide.

## 7. **HANDLING AND STORAGE**

Product is a Class 3 (Flammable liquid) dangerous good for road, rail and air transport. Must be transported and stored in accordance with dangerous goods rules.

### **Engineering Controls**

The use patterns of this product require its use in poorly ventilated areas and inside buildings. Always wear recommended breathing protection even when ventilation is good.\ Persons without appropriate breathing protection should not re-enter a building where treatment has occurred until application is completely dry (usually 3-4 hours) and the area is well ventilated.

### **Personal Protection**

When opening the container and using the product wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves, goggles and a half face piece respirator with organic vapour/gas cartridge or canister.

## 8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

When opening the container and using the product wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves, goggles and a half facepiece respirator with organic vapour/gas cartridge or canister.

## 9. **PHYSICAL AND CHEMICAL PROPERTIES**

Flash Point (°C)	46°C
Boiling Point (°C)	154°C
Flammability Limits (%)	N/A
Vapour Pressure:	2mm Hg
Solubility in Water (g/L):	Insoluble
Specific Gravity:	0.84

## 10. **STABILITY AND REACTIVITY**

<b>STABILITY</b>	Stable
<b>CONDITIONS TO AVOID</b>	Excessive heat
<b>INCOMPATIBILITY</b>	Water
<b>HAZARDOUS POLYMERIZATION</b>	None
<b>HAZARDOUS BYPRODUCTS</b>	Carbon monoxide or Carbon dioxide may be formed during combustion

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

Chlorpyrifos is an organo-phosphate insecticide and will inhibit cholinesterase. Symptoms of overexposure to the active constituent may include headaches, dizziness, incoordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhoea, sweating, constrictive pupils, and blurred vision, and salivation, tightness of the chest, excessive urination and convulsions.

### SWALLOWED

The acute oral toxicity of the active constituent is high with reported LD measurements for the active 115 mg/Kg. Injury or death may occur from the ingestion of the concentrate. If the concentrate enters the lungs, lung damage may occur due to chemical pneumonia caused by the solvents. Solvent is irritating to the gastro-intestinal tract and maybe harmful if swallowed.

### CHRONIC

Rats and mice which were administered the active ingredient in long term studies showed no increase in tumours compared to the control. Studies in rats and rabbits indicate that the active constituent does not cause birth defects or interfere with reproduction. May cause damage to internal organs through prolonged or repeated exposure and is a suspected human carcinogen.

## 12. ECOLOGICAL INFORMATION

### HSNO CLASSIFICATION

9.1A: very toxic to aquatic life with long lasting effects

LC50 of 0.0004 mg/L for fish

EC50 of 0.000058 mg/l in crustacean

9.2B: toxic to soil environments

9.3B: toxic to terrestrial vertebrates

LD50 of 8.4 mg/kg body weight in birds

9.4B toxic to terrestrial invertebrates

LD50 of 0.059 µg/honeybee

Chlorpyrifos degrades slowly in soil under both aerobic and anaerobic conditions. It has a half-life of 60-120 days. There is potential for chlorpyrifos sorbed to soil to run off into surface water via erosion, given that it has low water solubility (0.4 mg/L) and high soil binding capacity.

Chlorpyrifos has a high potential for bioaccumulation. It has been detected in fish tissues and chlorpyrifos residues in aquatic species may result in dietary exposure for aquatic birds and mammals feeding on aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

Break, crush or puncture and bury containers in an approved landfill.

**14. TRANSPORT INFORMATION**

UN NUMBER	2319
Other names	N/A
DG Class	3
Packing group	111
HAZCHEM Code	3WE

**15. REGULATORY INFORMATION**

ERMA Approval Code: HSR000172

**16. OTHER INFORMATION**

**Date of Preparation: May 2007 – updated July 2008**

**NOTICE**

Information for this product is believed to be reliable, however buyer and user assume all risk of use, handling and storage whether in accordance with directions or not.

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