

SAFETY DATA SHEET

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Date of Issue: March 2014

Section 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **BINKILL PROTECTOR**

Company: Lazco Investments Pty Ltd.
Address: 38 Mary St.
Noosaville, Queensland 4566
ACN/ABN: 61 069 972 354
Telephone Number: 0418 738 569
Emergency Contact: 0418 738 569
Full Product Name: Binkill Protector
Use: Insecticide for rubbish disposal bins.

Section 2. HAZARDS IDENTIFICATION

**Hazardous according to criteria of the ASCC.
Not classified as a Dangerous Good according to the ADG Code.**

GHS classification of the substance/mixture

Acute Toxicity – Oral: Category 4.
Sensitisation – skin: Category 1, 1A, 1B

Signal Word: WARNING.

Hazard statements:

H302 Harmful if swallowed.
H317 May cause an allergic skin reaction

Precautionary Statements:

Prevention:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray
P264 Wash hands, arms and face 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/eye protection/face protection.

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if feel unwell.
P330 Rinse mouth.

Disposal:

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

Pictograms:



Section 3. COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients*:**

CHEMICAL		PROPORTION
Dichlorvos (2,2-dichlorovinyl dimethyl phosphate)	62-73-7	186 g/kg
Other ingredients determined not to be hazardous		Balance

* The formulation of this product is proprietary information

Section 4. FIRST AID MEASURES**FIRST AID**

Ingestion: If swallowed get to a doctor or hospital quickly. Avoid giving milk or oils. Can be fatal to children if sucked or swallowed.

Eye contact: Unlikely to be an eye hazard. However, if eye contact is made hold eyes open, flood with water until chemical is removed and see a doctor.

Skin contact: If skin contact occurs, remove contaminated clothing and wash skin with soap and water.

Inhalation: Remove to fresh air.

Advice to Doctor: This product contains dichlorvos an anticholinesterase compound. Atropine sulphate in conjunction with Toxogonin or Obidoxim (PAM) is antidotal.

This product contains an Organophosphate (OP) Insecticide. However, it is the opinion of the manufacturer, and their Occupational Medical consultant, that any significant exposure to this OP Insecticide is highly unlikely. Based upon the formulation of the pest strip, the individual's contact with the OP is extremely limited by design. Therefore, the examining Physician should exercise prudent judgment in determining the causation of the patient's symptoms - taking care to not overlook multiple other etiologies of the patient's symptoms. If it is established that OP poisoning has occurred, the following steps are recommended.

Establish airway and oxygenation. IV Atropine sulfate is the antidote of choice. Moderately severe poisoning: use 0.4-2.0 mg in adults or 0.05 mg/kg in children. Repeat every 15 minutes until atropinization is achieved. Severe poisoning may require larger doses. Cholinergic toxicity may recur as atropinization wears off; monitor patient closely. Draw blood for RBC and plasma cholinesterase. In addition, Pralidoxime (2-PAM) is indicated during the first 36 hours in severe poisonings. Slow IV administration (no less than 2 minutes) of 1 gm in adults or 20-50 mg/kg in children may be repeated in 1 to 2 hours if muscle weakness, twitching, and/or respiratory depression persist. Avoid morphine, aminophylline, phenothiazines, reserpine, furosemide and ethacrynic acid.

Bathe and shampoo contaminated skin and hair. If ingested, empty stomach. If victim is alert, Syrup of Ipecac (2 tablespoons in adults, 1 tablespoon in small children) followed by water (2 glasses for adults, 1 glass for children) is indicated. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

Section 5. FIRE FIGHTING MEASURES

Specific Hazard: Product is a combustible solid if it is preheated.

Extinguishing media: Preferred extinguishing media are dry chemical, carbon dioxide and foam. Use water fog if not alternative available. Contain all run-off.

Hazards from combustion products: Product will burn and can emit toxic fumes. Molten material temperature can be above the boiling point of water and contact of water into the liquid may cause explosive boiling. Light flakes caused by sublimation may blow about creating a further fire hazard.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated.

Section 6. ACCIDENTAL RELEASE MEASURES

Emergence procedures / Material and methods for containment and cleanup procedures: For good hygiene practices, wear protective equipment to prevent skin contamination. In the case of spillage, contain spilled material and dispose of waste as indicated in section 13.

Section 7. HANDLING AND STORAGE

Precautions for safe handling: Do not open inner pouch until ready for use. Do not remove the insecticidal strip from the plastic case. Do not allow children to play with the strip. Wash hands after use.

Conditions for safe storage: Store in the closed, original container in a well ventilated area. Do not store for prolonged periods in direct sunlight. This product is a schedule 5 poison.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines:**

Exposure guidelines have not been established for this product by Safe Work Australia, however the manufacturer recommends the following guideline.

Atmospheric Contaminant	Exposure Standard (TWA) ^a	Exposure Standard STEL
Dichlorvos	0.9 mg/m ³ (0.1 ppm)	-

TWA = Time-weight Average. STEL = Short Term Exposure Limit

In normal use of this product this limits is unlikely to be exceeded.

Biological Limit Values:

Refer to Guidelines for Health Surveillance - but as use is expected to be very occasional and there is no handling of the product, no testing is required.

Engineering controls:

Use in ventilated areas. Do not open containers when not in use. No special engineering controls are required for normal use.

Personal Protective equipment (PPE):

In normal use no protect equipment is required as there is no handling of the active ingredient.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow or blue plastic strips in a plastic 'cage'.
Odour:	Mild chemical odour.
Boiling point:	> 200°C.
Freezing point:	Not applicable - solid at room temperature.
Density:	1.26 g/mL.
Solubility in Water:	Insoluble in water.
Flammability:	Combustible solid.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	No data available.
Flammability Limits (%):	Not established.
Poisons Schedule:	This product is a schedule 5 (S5) poison.

Section 10. STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions for a period of at least 2 years after manufacture. This product is unlikely to spontaneously decompose.

Conditions to avoid: Extreme heat. Contact with strong alkalis, oxidisers and reducing agents. Contact with fuels and other organic or combustible materials. Strong reducing agents.

Incompatible materials: Strong oxidising agents.

Hazardous Decomposition Products: Toxic products include oxides of carbon and phosphorus.

Hazardous Reactions: No special considerations.

Section 11. TOXICOLOGICAL INFORMATION

Potential Health Effects: No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on similar products and/or individual components. As with all products for which limited data is available, caution must be exercised through the use of protective equipment and handling procedures to minimise exposure. However, as the product is held within a plastic 'cage', no direct exposure is expected. The following relates to direct exposure to the active ingredient 'dichlorvos'.

ACUTE EFFECTS

- Swallowed: Harmful if swallowed. If swallowed, may cause irritation to mouth, throat and stomach. Can be fatal to children if sucked or swallowed. Acute Oral LD₅₀ = 679 (male) / 382 (female) mg/kg.
- Eye: Unlikely to have eye contact with normal use. May be irritating.
- Skin: Unlikely to have skin contact with normal use. Skin contact may cause skin sensitisation.
- Inhaled: Material contains a cholinesterase inhibitor. Inhalation of vapour may cause headaches, dizziness, irregular breathing and confusion.

Long Term Exposure: Dichlorvos is an anticholinesterase compound. Regular exposure may result in lowering of cholinesterase activity which will recover within a few days after exposure ceases.

Reproductive effects: There is no evidence that Dichlorvos affects reproduction.

Teratogenic effects: There is no evidence that Dichlorvos is teratogenic.

Mutagenic effects: Dichlorvos can bind to molecules such as DNA. For this reason, there has been extensive testing of Dichlorvos for mutagenicity. Several studies have shown Dichlorvos to be a mutagen; for example, Dichlorvos is reported positive in the Ames mutagenicity assay and in other tests involving bacterial or animal cell cultures. However, no evidence of mutagenicity has been found in tests performed on live animals. Its lack of mutagenicity in live animals may be due to rapid metabolism and excretion.

Carcinogenic effects: Dichlorvos has been classified as a possible human carcinogen because it caused tumors in rats and mice in some studies but not others. However, current evidence about the carcinogenicity of Dichlorvos is inconclusive.

Organ toxicity: Dichlorvos primarily affects the nervous system through cholinesterase inhibition, the blockage of an enzyme required for proper nerve functioning.

Fate in humans and animals: Dichlorvos is remarkable for its rapid metabolism and excretion by mammals. Dichlorvos does not accumulate in body tissues and has not been detected in the milk of cows or rats, even when the animals were given doses high enough to produce symptoms of severe poisoning.

Section 12. ECOLOGICAL INFORMATION

Breakdown in soil: Dichlorvos has low persistence in soil. Half-lives of 7 days were measured on clay, sandy clay, and loose sandy soil. In soil, Dichlorvos is subject to hydrolysis and biodegradation.

Breakdown in water: In water, Dichlorvos remains in solution and does not adsorb to sediments. It degrades primarily by hydrolysis, with a half-life of approximately 4 days in lakes and rivers. This half-life will vary from 20 to 80 hours between pH 4 and pH 9.

Breakdown in vegetation: Except for cucumbers, roses, and some chrysanthemums, plants tolerate Dichlorvos very well.

Section 13. DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup should use normal hygiene practices when cleaning up spills - see section 8. In case of spillage, contain spilled material and dispose of waste as indicated below. Keep material out of streams and sewers. Shovel waste into an approved drum. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

Dispose of empty container by wrapping in paper, placing in a plastic bag and putting in garbage.

Section 14. TRANSPORT INFORMATION

Not classified as a Dangerous Good by the criteria of the Australian Dangerous Goods Code when shipped in non-bulk packaging.

When shipped by vessel or in bulk packaging this product is regulated according to the data shown:

UN 3077, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains 20% Dichlorvos). Hazchem code 2Z. Hazard Identification Number (HIN) 90.

Section 15. REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Medicines and Poisons (SUMDP), this product is a schedule 5 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. APVMA No. 67600.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. (Xn, Xi)

This product is not classified as a Dangerous Good under the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Section 16. OTHER INFORMATION

Issue Date: 1 March 2014. (Valid for 5 years). First Issue.

Key to abbreviations and acronyms used in this MSDS:

ADG Code: Australian Dangerous Goods Code (for the transport of dangerous goods by Road and Rail).

Carcinogen: An agent which is responsible for the formation of a cancer.

Genotoxic: Capable of causing damage to genetic material, such as DNA.

Mutagenic: Capable of inducing a genetic mutation in an organism.

PPE: Personal protective equipment.

Teratogen: An agent capable of causing abnormalities in a developing foetus.

TWA: The Time Weighted Average airborne concentration over an eight-hour working day, for a five day working week over an entire working life.

STEL: Short Term Exposure Limit.

Safe Work Australia: Formally known as Australian Safety & Compensation Council (ASCC) which was formally known as the National Occupational Health & Safety Commission (NOHSC).

References

1. "Search Hazardous Substances". Safe Work Australia HSIS website. (2014).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.
3. Globally Harmonized System of Classification and Labelling of Chemicals (GHS). United Nations, 2009.

This SDS 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 should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

End SDS