



MATERIAL SAFETY DATA SHEET

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Date of Issue: January 2010

Section 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **BINKILL**

Company: Agspec Australia Pty Ltd.
Address: Lot 1 Wandilo Road,
Mt Gambier, SA 5290
ACN/ABN: 40 109 573 953
Telephone Number: 0427 490 551 **Fax Number:** 08 8125 6555
Emergency Contact: 0408 180 112

Full Product Name: Binkill
Use: Insecticide for rubbish disposal bins.

Section 2. HAZARDS IDENTIFICATION

**Hazardous according to criteria of Safe Work Australia.
Classified as a Dangerous Good according to the ADG Code**

Risk Phrases:
R21/22 Harmful in contact with skin and if swallowed.
R43 May cause sensitisation by skin contact.

Safety Phrases:
S2 Keep out of reach of children
S24/25 Avoid contact with skin and eyes.
S37 Wear suitable gloves.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients*:		PROPORTION
CHEMICAL		
Naphthalene	91-20-3	800 g/kg
Dichlorvos (2,2-dichlorovinyl dimethyl phosphate)	62-73-7	80 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 poisoning occurs 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 for at least 15 minutes and see a doctor.

Section 4. FIRST AID MEASURES (Continued)

Skin contact: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with soap and water. Apply a broad spectrum sunscreen to the affected areas as exposure has the potential to increase the chance of sunburn. Keep out of the sun.

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.

Section 5. FIRE FIGHTING MEASURES

Extinguishing media: This product is a flammable solid. Preferred extinguishing media are carbon dioxide, dry chemical and foam. Use water fog if not alternative. 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

Emergency 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: 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 6 poison.

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

The following exposure limits have been established by Safe Work Australia:

Atmospheric Contaminant	Exposure Standard (TWA) ^a	Exposure Standard STEL
Naphthalene	52 mg/m ³ (10 ppm)	79 mg/m ³ (15 ppm)
Dichlorvos	0.9 mg/m ³ (0.1 ppm)	-

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

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

Biological Limit Values:

Refer to Guidelines for Health Surveillance - but as use is expected to be very occasional, not 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.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)**Personal Protective equipment (PPE):**

Skin: Use normal hygiene practises when opening the container and using the product, by wearing rubber gloves when using. Wash before smoking, eating or using toilet facilities. Wash hands after use. Respiratory protection is generally not required.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Pink blocks.
Odour:	Naphthalene odour.
Boiling point:	> 200°.
Freezing point:	Not applicable - solid at room temperature.
Density:	1.07 at 20°C.
Solubility in Water:	Insoluble in water.
Flammability:	Flammable solid.
Corrosive hazard:	Not corrosive.
Flashpoint (°C):	> 80°.
Flammability Limits (%):	Not established.
Poisons Schedule:	Schedule 6 poison.

Section 10. STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable.

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: Decomposition begins at 120°C Toxic products include CO_x and PO_x. Molten product burns on ignition to produce dense black smoke.

Hazardous Reactions: No special considerations.

Section 11. TOXICOLOGICAL INFORMATION**Potential Health Effects:****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.

Eye: Irritating.

Skin: Skin contact may cause photosensitisation of skin areas and sunburn on subsequent exposure to UV alpha rays.

Inhaled: Material contains a cholinesterase inhibitor. Inhalation of vapour may cause headaches, dizziness, irregular breathing and confusion.

Long Term Exposure: No data is available for naphthalene. 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.

Section 11. TOXICOLOGICAL INFORMATION (Continued)

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. When naphthalene is released into the soil, this material may biodegrade to a moderate extent but may leach into groundwater. When released into the soil, this material is expected to quickly evaporate.

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. When naphthalene is released into the water it is expected to have a half-life between 1 and 10 days.

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

Breakdown in air: When naphthalene is released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals and have a half-life of less than 1 day.

Section 13. DISPOSAL CONSIDERATIONS

Spills and Disposal: Persons involved in cleanup should use normal hygiene practises 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

Classified as a Dangerous Good by the criteria of the Australian Dangerous Goods Code UN 3178. Proper Shipping Name: "FLAMMABLE SOLID, INORGANIC, NOS (Contains 80% Naphthalene)". Class 4.1 – Flammable Solid. Packing Group III. Hazchem Code 3W. Do NOT transport with Dangerous Goods of Classes 2.1, 4.2, 5.1, 5.2 or 7.

Section 15. REGULATORY INFORMATION

Under the Standard for Uniform Scheduling of Drugs and Poisons (SUSDP), this product is a schedule 6 poison.

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. APVMA No. 47695

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

This product is 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: 22 January 2010. (Correcting spelling errors).

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.

NOHSC National Occupational Health and Safety Commission.

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". HSIS Safe Work Australia website. (2010).
2. "Approved Criteria for Classifying Hazardous Substances" 3rd Ed. NOHSC Australia. [NOHSC:1008 (2004)]. October 2004.

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 should read this MSDS 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 MSDS