

Section 1 - Identification

Enviroside International Pty Ltd
244 Weller Road
Tarragindi QLD 4121 AUSTRALIA

Phone: 0455 340 490
Emergency: 0455 340 490

Chemical nature: Insecticide containing dichlorvos.
Trade Name: **BINKILL PROTECTOR**
APVMA Code: 67600
Product Use: Insecticide to protect against infestation of rubbish bins.
Creation Date: **February, 2024**
This version issued: **February, 2024** and is valid for 5 years from this date.
Poisons Information Centre: Phone 13 1126 from anywhere in Australia

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

SUSMP Classification: S5

ADG Classification: Class 9: Miscellaneous Dangerous Goods.

UN Number: 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DICHLORVOS)

**GHS Signal word: WARNING**

Skin Sensitisation Category 1

Acute Toxicity Oral and Dermal Category 4

Hazardous to aquatic environment Short term/Chronic Category 1

HAZARD STATEMENT:

H317: May cause an allergic skin reaction.

H302+H312: Harmful if swallowed or in contact with skin.

H410: Very toxic to aquatic life with long lasting effects.

PREVENTION

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P260: Do not breathe dusts/vapours.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash contacted areas 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.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing and eye or face protection.

RESPONSE

P363: Wash contaminated clothing before reuse.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P308+P313: If exposed or concerned: Get medical advice.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P370+P378: In case of fire: Use carbon dioxide, dry chemical, foam, water fog, to extinguish.

STORAGE

P405: Store locked up.

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

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Phone: 0455 340 490

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

Emergency Overview

Physical Description & Colour: Yellow or plastic strips inside a plastic "cage".

Odour: Mild chemical odour.

Section 3 – Composition and Information on Ingredients

Ingredients	CAS No	Conc, g/kg	TWA (mg/m ³)	STEL (mg/m ³)
Dichlorvos	62-73-7	186	0.9	not set
Other non hazardous ingredients	secret	to 1 kg	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 SWA 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 SDS with you when you call.

If swallowed, splashed on skin or inhaled, contact a Poisons Information Centre or a doctor at once. Remove any contaminated clothing and wash skin thoroughly. Hospital treatment may be necessary.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Gently brush away particles. If sensitising symptoms are experienced, remove victim from area and allow to breathe fresh air. If irritation persists, call a doctor or poisons information centre.

Eye Contact: Quickly and gently brush or rinse particles from eyes. No effects typically expected. If irritation does occur, 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.

Ingestion: If swallowed, do NOT induce vomiting. Immediately contact a Poisons Information Centre, or call a doctor. Wash mouth with water. If vomiting occurs naturally, lay patient on side, in recovery position as there is a chance that vomitus may enter airways causing harm to lungs.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is little risk of an explosion from this product if commercial quantities are involved in a fire.

Fire decomposition products from this product are likely to be irritating if inhaled.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

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 SDS 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. Take special care if handling this product over extended periods as it is a cumulative poison.

SAFETY DATA SHEET

Storage: This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Check packaging - there may be further storage instructions on the label.

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**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
Dichlorvos	0.9	not set

The ADI for Dichlorvos is set at 0.001mg/kg/day. The corresponding NOEL is set at 0.014mg/kg/day. ADI means Acceptable Daily Intake

NOEL means No-observable-effect-level. Data from Australian ADI List, March 2017.

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: This product should only be used where there is ventilation that is adequate to keep exposure below the TWA levels. If necessary, use a fan.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when this product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product for lengthy periods. See below for suitable material types.

Protective Material Types: There is no specific recommendation for any particular protective material type.

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable dust mask.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Yellow or plastic strips inside a plastic "cage".
Odour:	Mild chemical odour.
Freezing/Melting Point:	No specific data. Solid at normal temperatures.
Boiling Point:	Not available.
Flash point:	Combustible solid.
Upper Flammability Limit:	No data.
Lower Flammability Limit:	No data.
Flammability Class:	Combustible solid for which no flammability class applies.
Volatiles:	No data.
Vapour Pressure:	No data.
Vapour Density:	Not applicable.
Specific Gravity:	Approx 1.26
Water Solubility:	Insoluble.
pH:	No data.
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	Not applicable.
Coeff Oil/water Distribution:	No data
Particle Characteristics:	Product typically does not generate particles.
Viscosity:	Not applicable.
Autoignition temp:	No data.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

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 acids, strong bases, strong oxidising agents, strong reducing agents.

Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form oxides of phosphorus and other phosphorus compounds. May form hydrogen chloride

SAFETY DATA SHEET

gas, other compounds of chlorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: Polymerisation reactions are unlikely. They are not expected to occur.

Section 11 - Toxicological Information

Toxicity: An information profile for Dichlorvos is available at <http://extoxnet.orst.edu/pips/ghindex.html>

Acute toxicity: Dichlorvos is highly toxic by inhalation, dermal absorption, and ingestion. Because Dichlorvos is volatile, inhalation is the most common route of exposure. Dichlorvos is readily absorbed through the skin. Acute illness from Dichlorvos is limited to the effects of cholinesterase inhibition. Dichlorvos is rapidly metabolized and eliminated from the body. Persons with reduced lung function, convulsive disorders, liver disorders, or recent exposure to cholinesterase inhibitors will be at increased risk from exposure to Dichlorvos. Alcoholic beverages may enhance the toxic effects of Dichlorvos. Dichlorvos is mildly irritating to skin. Concentrates of Dichlorvos may cause burning sensations, or actual burns. Application of 1.67 mg/kg Dichlorvos in rabbits' eyes produced mild redness and swelling, but no injury to the cornea. Symptoms of acute exposure to organophosphate or cholinesterase-inhibiting compounds may include numbness, tingling sensations, incoordination, headache, dizziness, tremor, nausea, abdominal cramps, sweating, blurred vision, difficulty breathing or respiratory depression, slow heartbeat. Very high doses may result in unconsciousness, incontinence, and convulsions or fatality. Some organophosphates may cause delayed symptoms beginning 1 to 4 weeks after an acute exposure that may or may not have produced immediate symptoms. In such cases, numbness, tingling, weakness, and cramping may appear in the lower limbs and progress to incoordination and paralysis. Improvement may occur over months or years, but some residual impairment may remain. The oral LD50 for Dichlorvos is 61 to 175 mg/kg in mice, 100 to 1090 mg/kg in dogs, 15 mg/kg in chickens, 25 to 80 mg/kg in rats, 157 mg/kg in pigs, and 11 to 12.5 mg/kg in rabbits. The dermal LD50 for Dichlorvos is 70.4 to 250 mg/kg in rats, 206 mg/kg in mice, and 107 mg/kg in rabbits. The 4-hour LC50 for Dichlorvos is greater than 0.2 mg/L in rats.

Chronic toxicity: Repeated or prolonged exposure to organophosphates may result in the same effects as acute exposure, including the delayed symptoms. Other effects reported in workers repeatedly exposed include impaired memory and concentration, disorientation, severe depressions, irritability, confusion, headache, speech difficulties, delayed reaction times, nightmares, sleepwalking, and drowsiness or insomnia. An influenza like condition with headache, nausea, weakness, loss of appetite, and malaise has also been reported. Repeated, small doses generally have no effect on treated animals. Chronic exposure to Dichlorvos will cause fluid to build up in the lungs (pulmonary oedema). Liver enlargement has occurred in pigs maintained for long periods of time on high doses. Dichlorvos caused adverse liver effects, and lung haemorrhages may occur at high doses in dogs. In male rats, repeated high doses caused abnormalities in the tissues of the lungs, heart, thyroid, liver, and kidneys.

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 tumours 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. This product may affect gastrointestinal system, skin. Ingredients in this product have an established TWA, so exposure by inhalation should be avoided.

Major Health Hazards: Symptoms of acute exposure to organophosphate or cholinesterase-inhibiting compounds may include numbness, tingling sensations, incoordination, headache, dizziness, tremor, nausea, abdominal cramps, sweating, blurred vision, difficulty breathing or respiratory depression, slow heartbeat. Very high doses may result in unconsciousness, incontinence, and convulsions or fatality. may cause an allergic skin reaction, suspected of causing cancer. Signs and symptoms associated with mild exposures to organophosphate and carbamate pesticides include:

- headache, fatigue, dizziness, loss of appetite with nausea, stomach cramps and diarrhoea
- blurred vision associated with excessive tearing
- contracted pupils of the eye
- excessive sweating and salivation
- slowed heartbeat, often fewer than 50 per minute

SAFETY DATA SHEET

- rippling of surface muscles just under the skin.

These symptoms may be mistaken for those of flu, heat stroke or heat exhaustion, or upset stomach. Moderately severe organophosphate and carbamate insecticide poisoning cases exhibit all the signs and symptoms found in mild poisonings, but in addition, the victim:

- is unable to walk
- often complains of chest discomfort and tightness
- exhibits marked constriction of the pupils (pinpoint pupils)
- exhibits muscle twitching
- has involuntary urination and bowel movement. Severe poisonings are indicated by incontinence, unconsciousness and seizures.

This product is a cumulative poison. Minor exposures over a period of time may lead to serious health problems.

Classification of Hazardous Ingredients

Ingredient	Health Hazard Statement Codes
Dichlorvos	H330, H311, H301, H317, H400
• Acute toxicity – category 2 • Acute toxicity – category 3 • Acute toxicity – category 3 • Skin sensitisation – category 1 • Hazardous to the aquatic environment (acute) – category 1	

Potential Health Effects

Inhalation:

Short Term Exposure: Symptoms are described fully above.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Symptoms are described fully above.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: This product may be irritating to eyes, but is unlikely to cause anything more than mild transient discomfort.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Symptoms are described fully above.

Long Term Exposure: Long term minor exposures to this product may cause serious health effects.

Carcinogen Status:

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

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

IARC: Dichlorvos is classed 2b IARC - possibly carcinogenic to humans.

See the IARC website for further details. A web address has not been provided as addresses frequently change.

Section 12 - Ecological Information

This product is very toxic to aquatic life with long lasting effects. This product is not readily biodegradable; it may accumulate in the soil or water and cause long term problems.

Breakdown in soil and groundwater: 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

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

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Section 14 - Transport Information

Not subject to the ADG Code when transported by Road or Rail in Australia, in packages 500kg(L) or less; or IBCs, but classed as Dangerous by IATA and IMDG/IMSBC when carried by Air or Sea transport (see details below).

UN Number: 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DICHLORVOS)

Hazchem Code: 2Z

Special Provisions: 274, 331, 335, 375, AU01

Limited quantities: ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.

Dangerous Goods Class: Class 9: Miscellaneous Dangerous Goods.

Packing Group: III

Packing Instruction: P002, IBC08, LP02

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

Section 15 - Regulatory Information

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

The following ingredient: Dichlorvos, is mentioned in the SUSMP.

Section 16 - Other Information

This SDS 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 (7 th edition)
AICS/AIIC	Australian Inventory of Industrial Chemicals
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	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)
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

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 MUST REVIEW THIS SDS 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 SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (July 2020) and GHS Revision 7

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