

# SAFETY DATA SHEET

## SECTION 1

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Dingo 500 Insecticide**

**Other Names:** An organophosphorus pesticide, Group 1B Insecticide.  
**Use:** A liquid broad spectrum insecticide.  
**Company:** Apparent Pty Ltd  
**Address:** Suite G.08, 762 Toorak Rd, Glen Iris, Vic 3146.  
PO Box 3092, Cotham PO, Kew, Vic 3101  
**ACN/ABN:** 143 724 136  
**Telephone Number:** 03 9822 1321  
**Fax Number:** 03 9817 7845  
**Emergency Contact:** 0411 227 338  
**Email:** [wardell@bigpond.net.au](mailto:wardell@bigpond.net.au)

## SECTION 2

## HAZARDS IDENTIFICATION

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

### GHS Classification:

Acute toxicity: Category 3.  
Aspiration hazard: Category 1.

**Signal Word:** DANGER

### Hazard Statements:

H301 Toxic if swallowed  
H304 May be fatal if swallowed and enters airways  
H373 May cause damage to organs through prolonged or repeated exposure by skin absorption, inhalation or swallowing.

### Precautionary statements:

P260 Do not breathe vapours or spray.  
P264 Wash hands, arms and face thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves, protective clothing and eye/face protection.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P314 Get medical advice/attention if you feel unwell.  
P321 Specific treatment see Safety Directions on the label.  
P330 Rinse mouth.  
P331 Do NOT induce vomiting.  
P361 Remove immediately all contaminated clothing.  
P363 Wash contaminated clothing before reuse.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with national regulations.

### Pictograms:



**SECTION 3****COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Chlorpyrifos	2921-88-2	500 g/L
Hydrocarbon liquid	64742-94-5	495 g/L
Other ingredients determined not to be hazardous		Balance

**SECTION 4****FIRST AID MEASURES****FIRST AID**

- Ingestion:** If swallowed do NOT induce vomiting. Wash mouth with water. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 131 126. If swallowed, activated charcoal may be advised. Give atropine if instructed.
- Eye contact:** Immediately hold eyes open and flood gently with clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation persists, seek medical advice.
- Skin contact:** Immediately wash skin with soap and water to remove chemical. Remove contaminated clothing. If skin is irritated, seek medical advice. Launder contaminated clothing before re-use.
- Inhalation:** Remove to fresh air and observe until recovered. If effects persist, seek medical advice. In severe case, symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

**Advice to Doctor:** Chlorpyrifos is an anti-cholinesterase compound. Atropine by injection, is the preferred antidote. Oximes, such as 2-PAM/Protopam, may be therapeutic if used early; however, use only in conjunction with atropine. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. This product also contains aromatic solvents which may produce a chemical pneumonitis; therefore, vomiting is not recommended, and lavage requires intubation. Activated charcoal and cathartics will assist gastrointestinal tract evacuation.

**SECTION 5****FIRE FIGHTING MEASURES**

**Specific Hazard:** Combustible liquid (C1). Flash point > 62°C.

**Extinguishing media:** Extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

**Hazards from combustion products:** There is a risk of an explosion from this product if commercial quantities are involved in a fire. On heating will emit toxic fumes. Firefighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

**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****ACCIDENTIAL RELEASE MEASURES****Emergency procedures / Material and methods for containment and cleanup procedures:**

Extinguish all sources of ignition. Wear protective equipment to prevent skin/eye contamination. In the case of spillage, contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite and dispose of waste as indicated in section 13 or according to the Australian Standard 2507 - Storage and Handling of Pesticides. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

**Precautions for Safe Handling:** No smoking, eating or drinking should be allowed where material is used or stored. Keep out of reach of children. When opening the container, preparing the spray and using the prepared spray, wear chemical resistant clothing buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles, chemical resistant footwear and a half facepiece respirator with combined dust and gas cartridge.

**SECTION 7****HANDLING AND STORAGE**

If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product is in the eyes, wash it out immediately with water. After using and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber wash with detergent and warm water) and contaminated clothing.

**Conditions for Safe Storage:** Do not store for prolonged periods in direct sunlight. Not classified as a Dangerous Good. This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to state regulations for storage and transport requirements.

Store in the closed, original container in a well ventilated area away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight.

**SECTION 8****EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines:**

Exposure guidelines have been established for this product by safe Work Australia.

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m <sup>3</sup> )
Chlorpyrifos	0.2 mg/m <sup>3</sup>	Not set

TWA = Time-weight Average

**Biological Limit Values:**

This product is an organophosphate pesticide and health monitoring maybe required. See the Safe Work Australia guidance notes titled "Health monitoring for Exposure to Hazardous Chemicals" and "Organophosphate Pesticides".

**Engineering controls:**

Use in ventilated areas adequate to keep exposure below the TWA. Keep containers closed when not in use.

**Personal Protective equipment (PPE):**

General: Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated exposure may cause allergic disorders. Repeated minor exposure may have a cumulative poisoning effect. Will irritate the eyes and skin. Avoid contact with the eyes and skin. Do not inhale vapour or spray mist. When opening the container, preparing the spray and using the prepared spray, wear chemical resistant clothing buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves, goggles, chemical resistant footwear and a half facepiece respirator with combined dust and gas cartridge. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. If product is in the eyes, wash it out immediately with water. After using and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber wash with detergent and warm water) and contaminated clothing.

Hygiene Measures: After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash contaminated clothing and safety equipment.

**SECTION 9****PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Tan – yellow coloured liquid.
<b>Odour:</b>	Mercaptan odour (characteristic organophosphorus type odour).
<b>Boiling point:</b>	No data.
<b>Freezing point:</b>	No data.
<b>Specific Gravity:</b>	No data.
<b>Solubility in Water:</b>	Emulsifies in water.
<b>pH:</b>	No data available.
<b>Flammability:</b>	Combustible.

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**SECTION 9**      **PHYSICAL AND CHEMICAL PROPERTIES (Continued)**

**Corrosive hazard:** Not corrosive.  
**Flashpoint (°C):** > 62°C.  
**Poisons Schedule:** S6.

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**SECTION 10**      **STABILITY AND REACTIVITY**

**Chemical Stability:** Product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

**Conditions to avoid:** Do not store for prolonged periods in direct sunlight. Store away from sources of ignition.

**Incompatible materials:** Strong oxidising agents.

**Hazardous decomposition products:** When involved in a fire will emit toxic and noxious fumes.

**Hazardous reactions:** No particular reactions to avoid.

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**SECTION 11**      **TOXICOLOGICAL INFORMATION**

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.

Excessive exposure may produce organophosphate type cholinesterase inhibition. Signs and symptoms of excessive exposure to chlorpyrifos may be headache, dizziness, in-coordination, muscle twitching, tremors, nausea, abdominal cramps, diarrhoea, sweating, pinpoint pupils, blurred vision, salivation, tearing, tightness in chest, excessive urination, convulsions. For chlorpyrifos, in animals, effects have been reported on the following organs: adrenal gland. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use of this product.

**Potential Health Effects:**

**ACUTE EFFECTS**

Swallowed: Harmful if swallowed. Acute oral LD<sub>50</sub> for similar products range from 230 to 310 mg/kg.

Eye: This product may cause eye irritation. Symptoms may include stinging and reddening of eyes and watering. If exposure is brief, symptoms should disappear once exposure has ceased.

Skin: May cause mild irritation of the skin, but unlikely to be sensitising. A single prolonged exposure may result in material being absorbed in large amounts. Repeated minor exposure may have a cumulative poisoning effect.

Inhaled: Probably an inhalation irritant.

**Long Term Exposure:**

**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 depression, irritability, confusion, headache, speech difficulties, delayed reaction times, nightmares, sleepwalking, and drowsiness or insomnia. Human volunteers who ingested 0.1 mg/kg/day of chlorpyrifos for 4 weeks showed significant plasma cholinesterase inhibition.

**Reproductive effects:** Current evidence indicates that chlorpyrifos does not adversely affect reproduction. No effects on reproduction occurred in a three-generation study with rats fed dietary doses as high as 1 mg/kg/day.

**Teratogenic effects:** Available evidence suggests that chlorpyrifos is not teratogenic. No teratogenic effects in offspring were found when pregnant rats were fed doses as high as 15 mg/kg/day for 10 days.

**Mutagenic effects:** There is no evidence that chlorpyrifos is mutagenic.

**Carcinogenic effects:** There is no evidence that chlorpyrifos is carcinogenic.

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**SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**

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

**Fate in humans and animals:** Chlorpyrifos is readily absorbed into the bloodstream through the gastrointestinal tract if it is ingested, through the lungs if it is inhaled, or through the skin if there is dermal exposure. In humans, chlorpyrifos and its principal metabolites are eliminated rapidly with a half-life in the blood of approximately 1 day. Chlorpyrifos is eliminated primarily through the kidneys. Chlorpyrifos does not have a significant bioaccumulation potential. Following intake, a portion is stored in fat tissues but it is eliminated in humans, with a half-life of about 62 hours.

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**SECTION 12 ECOLOGICAL INFORMATION**

**Environmental Toxicology:** Chlorpyrifos is moderately to very highly toxic to birds. Acute oral LD<sub>50</sub> = 8.41 mg/kg (pheasants), 112 mg/kg (mallard ducks), 21.0 mg/kg (house sparrows), and 32 mg/kg (chickens). At 125 ppm, mallards laid significantly fewer eggs. There was no evidence of other changes in hens fed dietary levels of 50 ppm of chlorpyrifos. Chlorpyrifos is very highly toxic to freshwater fish, aquatic invertebrates and estuarine and marine organisms. Cholinesterase inhibition was observed in acute toxicity tests of fish exposed to very low concentrations of this insecticide. The 96-hour LC<sub>50</sub> = 0.009 mg/L (mature rainbow trout), 0.098 mg/L (lake trout), 0.806 mg/L (goldfish), 0.01 mg/L (bluegill), and 0.331 mg/L (fathead minnow). When fathead minnows were exposed to a similar product for a 200-day period during which they reproduced, the first generation of offspring had decreased survival and growth, as well as a significant number of deformities. This occurred at approximately 0.002 mg/L exposure for a 30-day period. Chlorpyrifos accumulates in the tissues of aquatic organisms. Studies involving continuous exposure of fish during the embryonic through fry stages have shown bioconcentration values of 58 to 5100. Due to its high acute toxicity and its persistence in sediments, chlorpyrifos may represent a hazard to sea bottom dwellers. Smaller organisms appear to be more sensitive than larger ones. Aquatic and general agricultural uses of chlorpyrifos pose a serious hazard to wildlife and honeybees.

**Environmental Fate:**

Based largely or completely on information for chlorpyrifos. The photolysis half-life in water is 3-4 weeks. In the atmospheric environment, material is estimated to have a tropospheric half-life of 1.4 hours. Degradation is expected in the soil environment within days to weeks. Under aerobic soil conditions the half-life is generally 30-60 days. Expected to be relatively immobile in the soil ( $K_{oc} > 5000$ ).

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**SECTION 13 DISPOSAL CONSIDERATIONS**

**Spills and Disposal:** Persons involved in cleanup require adequate skin protection - see section 8. In case of spillage, contain and absorb spilled material with absorbent material such as clay, sand or cat litter and dispose of waste as indicated below or in accordance to the Australian Standard 2507-Storage and Handling of Pesticides. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Dispose of drummed wastes, including decontamination solution in accordance with the requirements of Local or State Waste Management Authorities.

**Disposal of empty containers:** Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do NOT dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty container or product.

**SECTION 14****TRANSPORT INFORMATION**

**Road & Rail Transport:** This product is classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail. UN 3018 PESTICIDES, ORGANOPHOSPHORUS, LIQUID, TOXIC. Packaging Group III. Hazchem 2X. Hazard Identification number 60. This product is a Combustible Liquid (C1).

This product is a Schedule 6 Poison (S6) and must be stored, transported and sold in accordance with the relevant Health Department regulations.

**SECTION 15****REGULATORY INFORMATION**

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

This product is registered under the Agricultural and Veterinary Chemicals Code Act 1994. Product Registration No. 65160.

This product is classified as a Hazardous Substance under the criteria of Safe Work Australia. Xn: Harmful, Xi: Irritant.

This product is classified as a Dangerous Good according to the ADG Code (7<sup>th</sup> Ed).

Requirements concerning special training:

Check State or Territory regulations that require people who use pesticides in their job or business to have training in the application of the materials.

**SECTION 16****OTHER INFORMATION**

Issue Date: 20 November 2013. (First issue).

Key to abbreviations and acronyms used in this SDS:

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.

LD<sub>50</sub>: Median Lethal Dose. A statistically derived single dose of a substance that can be expected to cause death in 50% of dosed animals.

OCS: Office of Chemical Safety.

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.

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 website. (2013).
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