

# SAFETY DATA SHEET

## SECTION 1

## IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: **Apparent Deltamethrin Duo Insecticide**

**Other Names:** A synthetic pyrethroid pesticide, Group 3A Insecticide.  
**Use:** A liquid broad spectrum agricultural insecticide.  
**Company:** Apparent Pty Ltd.  
**Address:** Suite G.08, 762 Toorak Road, Hawthorn East, Vic. 3123.  
PO Box 3092, Cotham PO, Kew, Vic 3101.  
**ACN/ABN:** 143 724 136  
**Telephone Number:** 03 9822 1321  
**Email:** [enquiries@apparentag.com.au](mailto:enquiries@apparentag.com.au)  
**Emergency Contact:** 0411 227 338

## SECTION 2

## HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.  
Classified as a Dangerous Good according to the ADG Code.  
Combustible Liquid (C1).**

**Globally Harmonised System (GHS) classification of the substance/mixture:**

Flammable Liquids – Category 4.  
Acute Toxicity – Oral: Category 4.  
Aspiration Hazard: Category 1.  
Acute Toxicity – Inhalation: Category 4.  
Hazardous to the Aquatic Environment – Long-Term Hazard – Category 1.

**Signal Word:** DANGER.

**Hazard statements:**

H227 Combustible liquid.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H332 Harmful if inhaled.  
H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statements:**

*Prevention:*

P210 Keep away from heat/sparks/open flames/hot surfaces: — No smoking.  
P261 Avoid breathing mist, vapours or spray.  
P264 Wash hands, arms and face thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

*Response:*

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
P330 Rinse mouth.  
P331 Do NOT induce vomiting.  
P370 + P378 In case of fire: Use carbon dioxide, foam or dry agent for extinction.  
P391 Collect Spillage.

**SECTION 2****HAZARDS IDENTIFICATION****Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

**Disposal:**

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>
Deltamethrin	52918-63-5	27.5 g/L
Hydrocarbon liquid	64742-94-5	807 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. Give plenty of water to drink. Get to a doctor or hospital quickly.
- 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:** Remove contaminated clothing. Wash skin with soap and water to remove chemical. If skin is irritated, seek medical advice.
- Inhalation:** Remove to fresh air and observe until recovered. If irritation or symptoms persist more than about 30 minutes, seek medical advice.

**Advice to Doctor:** Deltamethrin is a pyrethroid insecticide and is less than 3% of the formulation. The formulation contains a high level (88%) of petroleum distillate that can cause severe pneumonitis or fatal pulmonary oedema if aspirated. Consideration should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise symptomatic and supportive. In cases of skin contact, it has been reported that topical applications of Vitamin E acetate was found to have very high therapeutic value, eliminating almost 100% of the skin pain associated with synthetic pyrethroids.

**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.

**Hazards from combustion products:** Sealed, overheated containers may present an explosion hazard. Thermal decomposition and burning will produce toxic by-products (eg. oxides of carbon and nitrogen and bromine compounds). Fire-fighters 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****ACCIDENTAL RELEASE MEASURES**

**Emergency 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 per the requirements of Local or State Waste Management Authorities. Wear prescribed protective clothing and equipment. Keep out animals and unprotected persons.

**Material and methods for containment and cleanup procedures:** To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected.

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

**Precautions for Safe Handling:** No smoking, eating or drinking should be allowed where material is used or stored. Keep out of reach of children. Do not store for prolonged periods in direct sunlight. Product is poisonous if swallowed. Facial skin contact may cause temporary numbness. Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow length PVC gloves and face shield. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. Wash hands after use. After each day's use, wash gloves, face shield and contaminated clothing

**Conditions for Safe Storage:** 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 not been established for this product by Safe Work Australia. However the following standards may apply:

Atmospheric Contaminant	Exposure Standard (TWA)	STEL (mg/m <sup>3</sup> )
Butylated Hydroxytoluene	10 mg/m <sup>3</sup>	Not set
Acetic Acid	25 mg/m <sup>3</sup> (10 ppm)	37 mg/m <sup>3</sup> (15 ppm)

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

Note: These ingredients are at very low levels in this product. The combined total of these two ingredients is less than 2% of the total product. It is highly unlikely that these exposure standards would be exceeded using this product.

**Biological Limit Values:**

No biological limit allocated.

**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:** When preparing spray wear cotton overalls buttoned to the neck and wrist and a washable hat and elbow length PVC gloves and face shield. If product on skin, immediately wash area with soap and water. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Wash hands after use. After each day's use, wash gloves, face shield and contaminated clothing.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION (Continued)**

Personal Hygiene: Product is poisonous if swallowed. Facial skin contact may cause temporary numbness. Will damage eyes and will irritate the skin. Avoid contact with eyes and skin. Avoid inhaling vapour or spray mist. Clean water should be available for washing in case of eye or skin contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Clear yellow coloured liquid.
<b>Odour:</b>	Hydrocarbon 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 liquid (C1).
<b>Corrosive hazard:</b>	Not corrosive.
<b>Flashpoint (°C):</b>	> 62°C.
<b>Poisons Schedule:</b>	S6.
<b>Formulation type:</b>	Emulsifiable Concentrate (EC).

**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:** Store away from sources of ignition. Do not store for prolonged periods in direct sunlight. Avoid alkaline materials.

**Incompatible materials:** Avoid strong acids, bases and oxidizing agents.

**Hazardous decomposition products:** When involved in a fire will emit toxic and noxious decomposition products/fumes (eg. oxides of carbon and nitrogen and bromine compounds).

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

**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. This formulation contains aromatic hydrocarbons.

Inhalation of aromatic hydrocarbon vapours may cause central nervous system depression, dizziness, disturbances in vision and respiratory irritation. Moderately irritating to the eyes. Contact with the skin may be irritating.

**Potential Health Effects:****ACUTE EFFECTS**

**Swallowed:** Swallowing can cause nausea, vomiting and central nervous system depression caused by the solvent in this product. If patient shows sign of central nervous system depression (like those of drunkenness) there is a greater chance of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

**Eye:** This product may be severely irritating to the eyes.

**Skin:** This product may be irritating to the skin and may be sensitising. Contact with the skin, especially the face, may result in initial stinging, burning or tingling sensations (fingertips, nose), followed by numbness or pain which may persist for up to 24 hours. Repeated exposure may cause skin dryness or cracking.

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**SECTION 11 TOXICOLOGICAL INFORMATION (Continued)**

**Inhaled:** Inhalation of mists or sprays may produce respiratory irritation. Inhalation of aromatic hydrocarbon vapours may cause dizziness, disturbances in vision, and irritation to the eyes, skin and mucous membrane of the respiratory and gastrointestinal tracts. Breathing high concentrations can produce central nervous system depression, which can lead to loss of coordination, impaired judgement, and in circumstances of prolonged exposure, unconsciousness.

Toxicological data (from similar product):

Oral toxicity: LD<sub>50</sub> rat: > 5000 mg/kg

Dermal toxicity: LD<sub>50</sub> rabbit: > 2000 mg/kg

Inhalation toxicity: LC<sub>50</sub> rat: > 10 mg/L

Skin irritation: Slightly irritating (rabbit)

Eye irritation: Irritating (rabbit)

Sensitisation: Non-sensitising (guinea pig)

**Long Term Exposure:** Deltamethrin is not mutagenic, carcinogenic or teratogenic.

Elimination of deltamethrin in the rat occurs within 2-4 days of administration. Deltamethrin has a half-life in the rat brain of 1 to 2 days, but it is more persistent in body fat, with a half-life of 5 days. In mammals, the point of death from deltamethrin poisoning is sharply defined by respiratory or cardiac failure. A health survey of 199 workers who repacked pyrethroid insecticides into boxes by hand indicated that about two-thirds of the workers had a burning sensation and tightness and numbness on the face, while one-third had sniffs and sneezes. Abnormal sensations in the face, dizziness, tiredness and red rashes on the skin were more common in summer than in winter. Workers did not wear protective gloves in summer because of the heat. The symptoms usually occurred thirty minutes after exposure to the pyrethroids and rarely lasted more than 24 hours

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**SECTION 12****ECOLOGICAL INFORMATION**

**Environmental Toxicology:** No data is available on this product. Deltamethrin is highly toxic to fish, aquatic organisms and bees in laboratory studies, but considered less toxic under natural conditions. In field conditions under normal conditions of use, deltamethrin had an impact on aquatic herbivorous insects. This impact led to an increase of algae. Although the fish (fathead minnows) accumulated deltamethrin, no mortality could be observed. In laboratory trials, the LC<sub>50</sub> for fish was 1-10 micrograms/L. Aquatic fauna, particularly crustacean, may be affected, but fish are not harmed under normal conditions of use. Dangerous to bees. DO NOT spray on any plants in flower while bees are foraging.

**Environmental Fate:** Deltamethrin is not persistent in the environment. It is degraded by soil micro-organisms and does not leave residues in the environment or build up in the food chain. In soil, degradation occurs within 1-2 weeks. Deltamethrin in pond water was rapidly adsorbed, mostly by sediment, in addition to uptake by plants and evaporation into the air. About 10 days after use, there are no deltamethrin residues observed on plants. There is no known phytotoxicity to crops.

DO NOT contaminate streams, rivers or waterways with Deltamethrin Duo or the used containers.

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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 with the requirements of Local or State Waste Management Authorities. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum.

**Disposal of empty containers:** Triple-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 to an approved waste management facility. If an approved waste management facility is not available, bury

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**SECTION 13 DISPOSAL CONSIDERATIONS (Continued)**

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 containers or product.

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**SECTION 14 TRANSPORT INFORMATION**

**Road & Rail Transport:** This product is not classified as a Dangerous Goods under the Australian Code for the Transport of Dangerous Goods by Road and Rail in containers less than 3000 litres. Bulk shipments should use UN 3082, as per below. This product is a Combustible Liquid (C1) for storage purposes.

**Marine and Air Transport:** Apparent Deltamethrin Duo Insecticide is a Marine Pollutant according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA). If transporting by sea or air the following Dangerous Goods Classification applies:-  
UN 3082, Class 9 (Miscellaneous Dangerous Goods), Packing Group III, Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains Deltamethrin), Hazchem ●3Z. Hazard Identification Number (HIN) 90. Australian Standards Initial Emergency Response Guide No. 47.

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

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**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. 67007.

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

This product is not classified as a Dangerous Good according to the ADG Code for packs less than 3000 litres (SP AU01) (7<sup>th</sup> Ed).

This product is classified as a Dangerous Good according to International Maritime Dangerous Goods (IMDG) Code and the International Air Transport Association (IATA).

*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.

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**SECTION 16 OTHER INFORMATION**

Issue Date: 9 June 2016. Valid for 5 years till 9 June 2021 (Revised to GHS).

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.

HSIS: Hazardous Substances Information System.

Lacrimation: The production, secretion, and shedding of tears.

Lavage: A general term referring to cleaning or rinsing.

Mutagen: An agent capable of producing a mutation.

OCS: Office of Chemical Safety.

Pneumonitis: A general term that refers to inflammation of lung tissue.

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.

**SECTION 16 OTHER INFORMATION (Continued)**

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. (2016).
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.