

## SAFETY DATA SHEET



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Date of Issue: Aug 2021  
SDS No. FMC/DRARES/1

### SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name: DRAGNET RESIDUAL INSECTICIDE**

**Other Names:** Permethrin. Group 3A Insecticide.  
**Use:** Insecticide for the control of insect pests in various situations.  
**Company:** FMC Australasia Pty Ltd.  
**Address:** 12 Julius Ave, North Ryde, NSW 2113.  
**Telephone Number:** Freecall 1800 624 597 (Business hours).  
**Emergency Telephone Number:** 1800 033 111 (24 hours - Australia wide).

### SECTION 2 HAZARDS IDENTIFICATION

**Classified as hazardous according to criteria of Safe Work Australia.  
Not classified as a Dangerous Good according to the ADG Code.**

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

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

**Signal Word:** DANGER.

#### **Hazard statements:**

H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

#### **Precautionary Statements:**

##### **Prevention:**

P210 Keep away from flames and hot surfaces – No smoking.  
P261 Avoid breathing mist, vapours or spray.  
P264 Wash contacted areas thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
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 protection or face protection.

##### **Response:**

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor if feel unwell.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**SECTION 2 HAZARDS IDENTIFICATION (Continued)****Response (Cont):**

P312	Call a POISON CENTER or doctor if you feel unwell.
P321	Specific treatment see Safety Directions on this label.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P333 + P313	If skin irritation or rash occurs: Get medical advice.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire use dry agent, carbon dioxide or alcohol resistant foam for extinction.
P391	Collect Spillage.

**Storage:**

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

**Disposal:**

P501	Dispose of contents and containers as specified on the registered label.
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**Pictograms:****SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

<b>CHEMICAL</b>	<b>CAS NUMBER</b>	<b>PROPORTION</b>
Permethrin	52645-53-1	500 g/L
Liquid hydrocarbon	64742-94-5	457 g/L
Other ingredients determined to be non-hazardous		Balance

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

<b>Swallowed:</b>	If swallowed, rinse mouth with water and give 1 or 2 glasses of water to drink. If any discomfort persists seek medical advice. Do NOT induce vomiting.
<b>Eye:</b>	If in eyes, hold eyes open and flush with clean water until chemical is removed. If irritation occurs and persists, obtain medical attention.
<b>Skin:</b>	If on skin, or hair, wash with soap and water. Remove contaminated clothing. If irritation occurs and persists, see a doctor. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. Launder contaminated clothing before re-use.
<b>Inhaled:</b>	Remove patient to fresh air. If breathing discomfort occurs, obtain medical attention.

**Advice to Doctors:** The signs and symptoms of poisoning with permethrin are not very pronounced and are likely to consist of hypersensitivity type reactions. There is no specific antidote to permethrin. Symptomatic and supportive treatment is indicated. The formulation also contains petroleum distillates 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.

**SECTION 5 FIRE FIGHTING MEASURES**

**Specific Hazard:** Product is a combustible liquid (C1). Flash point > 65°C.

**Extinguishing media:** Alcohol resistant foam, CO<sub>2</sub> or dry chemical. Soft stream water fog if no alternatives. Contain all runoff.

**SECTION 5 FIRE FIGHTING MEASURES (Continued)**

**Hazards from combustion products:** On burning will emit toxic and irritating fumes. Eruption of containers is likely if confined at high temperatures. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated. Fight fire from maximum distance or protected area. Contain all runoff.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Emergency procedures:** Isolate and post spill area. Wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. In the case of spillage, stop leak if safe to do so, and contain spill. Prevent spillage entering drains or watercourses. Contain and absorb spilled material with absorbent material such as sand, clay, cat litter or material such as vermiculite. Collect recoverable product for use as labelled on the product. Vacuum, shovel or pump contaminated spilled material into an approved container and dispose of waste as per the requirements of Local or State Waste Management Authorities. 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. Dispose of waste as per the requirements of Local or State Waste Management Authorities.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

**SECTION 7 HANDLING AND STORAGE**

**Precautions for Safe Handling:** Ensure containers are kept closed until using product. Product is harmful if swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Do not inhale spray mist. When opening the container and preparing spray or dip wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

**Conditions for Safe Storage:** DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers. 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.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION****National Exposure Standards:**

No exposure standard has been established by Safe Work Australia for this product.

**Biological Limit Values:**

No biological limit allocated.

**Engineering controls:**

Use in well ventilated area only. Use local exhaust at all process locations. Ventilate all transport vehicles prior to unloading. Keep containers closed when not in use.

**Personal Protective Equipment (PPE):**

General: When opening the container and preparing spray or dip wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and face shield or goggles. Wash hands after use. After each day's use, wash gloves, face shield or goggles and contaminated clothing.

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

**Personal Hygiene:** Product is harmful if swallowed. Will irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Do not inhale 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>	Pale brown liquid.
<b>Odour:</b>	Mild aromatic hydrocarbon odour.
<b>Boiling point:</b>	Not available.
<b>Freezing point:</b>	Not available.
<b>Specific Gravity:</b>	Approximately 1.1 g/mL.
<b>pH:</b>	No data available.
<b>Solubility in Water:</b>	Product emulsifies in water.
<b>Flammability:</b>	Combustible liquid (C1).
<b>Flashpoint (°C):</b>	> 65°C.
<b>Corrosive hazard:</b>	Not known to be corrosive.
<b>Flammability Limits (%):</b>	Not established.
<b>Poisons Schedule:</b>	Product is a schedule 6 (S6) poison.
<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:** Keep in a cool place. Keep away from sources of heat and naked flames.

**Incompatible materials:** Keep away from strong acids, strong bases and strong oxidizing agents.

**Hazardous decomposition products:** On burning will emit toxic and irritating fumes.

**Hazardous reactions:** Will not polymerise.

**SECTION 11 TOXICOLOGICAL INFORMATION*****Potential Health Effects:***

Studies with laboratory animals have shown permethrin (the active ingredient in this product) to have low oral, dermal and inhalation toxicity. It is minimally irritating to the eyes and practically non-irritating to the skin. Permethrin is a skin sensitiser. Experience to date indicates that contact with permethrin may produce skin sensations such as numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours. Large doses of permethrin ingested by laboratory animals produced signs symptoms such as diarrhoea, salivation, tremors and intermittent convulsions. Overexposure of animals to permethrin via inhalation has also produced hyperactivity and hypersensitivity.

**Acute**

**Swallowed:** Harmful if swallowed.

**Eye:** May irritate the eyes. Symptoms include stinging, watering and reddening of the eyes.

**Skin:** Mildly irritating. Avoid contact with skin. Experience to date indicates that contact with Dragnet may produce skin sensations such as numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.

**Inhaled:** Inhalation of spray or vapour may produce respiratory irritation and can result in headaches, dizziness and possibly nausea.

**Chronic:** No data available on this formulation. Permethrin is not known to be carcinogenic, genotoxic, teratogenic or mutagenic. Permethrin is efficiently metabolized by mammalian livers. Breakdown products, or metabolites of Permethrin are quickly excreted and do not persist significantly in body tissues. Permethrin may persist in fatty tissues, with half-lives of 4 to 5 days in brain and body fat.

**SECTION 12 | ECOLOGICAL INFORMATION**

**Environmental Toxicology:** Permethrin is of low to moderate persistence in the soil environment, with reported half-lives of 30 - 38 days. Permethrin is readily degraded in most soils except organic types. Soil microorganisms play a large role in the degradation of Permethrin in the soil and it has also been observed that the availability of sodium and phosphorous decreases when Permethrin is added to the soil. Permethrin is tightly bound by soils, especially by organic matter. Very little leaching of Permethrin has been reported. It is not very mobile in a wide range of soil types. Because Permethrin binds very strongly to soil particles and is nearly insoluble in water, it is not expected to leach or to contaminate groundwater.

**Environmental Properties:** Permethrin is practically non-toxic to birds. LD<sub>50</sub> = 9900 mg/kg mallard ducks, >13,500 mg/kg in pheasants, and >15,500 mg/kg in Japanese quail. Permethrin is toxic to aquatic organisms. 48-hour LC<sub>50</sub> = 0.0125 mg/L rainbow trout; 48-hour LC<sub>50</sub> = 0.0018 mg/L bluegill sunfish and salmon. Bioconcentration factor for Permethrin in bluefish is 715 and 703 in catfish. This indicates that permethrin has a low to moderate potential to accumulate in these fish. Permethrin is extremely toxic to bees. Severe losses may be expected if bees are present at treatment time, or within a day thereafter. Permethrin is also toxic to some wildlife. It should not be applied, or allowed to drift, to crops or weeds in which active foraging takes place.

**SECTION 13 | DISPOSAL CONSIDERATIONS**

**Disposal:** Label all recovered material for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

*Dangerous to Fish and Crustaceans:* Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

**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 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.

**SECTION 14 | TRANSPORT INFORMATION**

**Road & Rail Transport:** This product is exempt from classification as a Dangerous Good in packs less than 3,000 kg or litres under the Australian Code for the Transport of Dangerous Goods by Road and Rail. For bulk shipments this product is a class 9, UN 3082 (3077). (See special provision AU01).

**Marine and Air Transport:** Dragnet Residual Insecticide is classified as 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 Permethrin). Hazchem code ●3Z. Hazard Identification Number (HIN) 90. Australian Standards Initial Emergency Response Guide No. 47.

**SECTION 15 | REGULATORY INFORMATION**

Classified as a hazardous substance according to criteria of Safe Work Australia.

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. 51401.

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

**SECTION 15 REGULATORY INFORMATION (Continued)**

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.

**SECTION 16 OTHER INFORMATION**

Issue Date: 16 Aug 2021. Valid for 5 years. (Updated 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).
Ataxia:	Inability to control the coordinate movements of the muscles.
Bradycardia:	Is a resting heart rate of under 60 beats per minute (adults).
Carcinogen:	An agent which is responsible for the formation of a cancer.
Clonic:	An abnormality in neuromuscular activity characterized by rapidly alternating muscular contraction and relaxation.
Combustible Liquid:	Liquids that ignite with a flash point greater than 60°C.
Flammable Liquid:	Liquids that ignite with a flash point less than 60°C.
Genotoxic:	Capable of causing damage to genetic material, such as DNA.
Haematopoietic:	Pertaining to the formation of blood or blood cells.
Lavage:	The irrigation or washing out of an organ, as of the stomach or bowel.
Mutagen:	An agent capable of producing a mutation.
Oedema:	Accumulation of fluid in tissues.
Teratogen:	An agent capable of causing abnormalities in a developing foetus.
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. (2020 edition 7.7).
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.*