

Section 1 - Identification of The Material and Supplier

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Chemical nature: Ready to use powder-based insecticide.

Trade Name: PERMETHOR™ Magnetic Insecticidal Dust with Magthanite®

Product Code: Australia APVMA: 68833

Product Use: Insecticide for use as described on the registered product label.

Creation Date: September, 2018

This version issued: September, 2018 and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: This product is not hazardous according to the criteria of SWA.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: Not hazardous.

Safety Phrases: S22, S24/25, S36/37/39. Do not breathe dust. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMSBC criteria.

IATA: Non-hazardous for air transport.

UN Number: None allocated.



GHS Signal word: WARNING

HAZARD STATEMENT:

H317: May cause an allergic skin reaction.

H400: Very toxic to aquatic life.

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

PREVENTION

P261: Avoid breathing dust.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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

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

P363: Wash contaminated clothing before reuse.

STORAGE

P410: Protect from sunlight.

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

DISPOSAL

P501: If they cannot be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

Emergency Overview

Physical Description & colour: Off-white, slightly grey powder.

Odour: Negligible.

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Potential Health Effects

Inhalation:

Short term exposure: Available data indicates that his product is not harmful.

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

Skin Contact:

Short term exposure: Product may cause transient discomfort in sensitive person. Repeated exposure may cause allergic disorders.

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

Eye Contact:

Short term exposure: Product will irritate, although unlikely to cause more than transient discomfort.

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

Ingestion:

Short term exposure: This product is unlikely to cause any irritation problems.

Long Term exposure: This product is unlikely to cause any irritation problems.

Carcinogen Status:

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

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

IARC: Permethrin is Class 3 – unclassifiable as to carcinogenicity to humans.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m ³)	STEL (mg/m ³)
Permethrin	52645-53-1	1 (10 g/kg)	not set	not set
Other non-hazardous ingredients	various	to 100	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 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Skin Contact: If significant skin contact occurs, wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until product is removed. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a doctor.

Eye Contact: Quickly and gently blot or brush particles from eyes. Flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. 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: Rinse mouth. Do NOT induce vomiting. Keep patient warm and at rest. Obtain medical attention.

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Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. Wear protective clothing including face shield and gloves. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak and contain spill.

Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. After spills, wash area preventing run-off from entering drains. If a significant quantity of material enters drains, advise emergency services. This material may be suitable for approved landfill. Ensure legality of disposal by consulting regulations prior to disposal. Launder clothing before storage or re-use.

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.

Storage: Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. 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/m³) STEL (mg/m³)

Exposure limits have not been established by NOHSC for any of the significant ingredients in this product.

The ADI for permethrin is set at 0.05 mg/kg/day. The corresponding NOEL is set at 5 mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, Dec 2002.

Ventilation: No special ventilation requirements are normally necessary for this product.

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

Skin Protection: Minimise skin contact by wearing gloves and overalls.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Section 9 - Physical and Chemical Properties

Physical Description & colour: Off-white, slightly grey powder.

Odour: Negligible.

Boiling Point: Not applicable.

Freezing/Melting Point: Decomposes before melting.

Volatiles: No specific data. Expected to be low at 100 °C.

Water Solubility: Negligible.

Autoignition temp: Not applicable – does not burn.

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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 direct sunlight. Store in the closed original container in a dry, ventilated area.

Incompatibilities: No particular incompatibilities.

Fire Decomposition: Only small quantities of decomposition products are expected at temperature normally achieved in a fire. Carbon dioxide, and if incomplete, carbon monoxide and possibly smoke.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity: Acute toxicity: Permethrin is harmful to non-harmful via the oral route, with a reported LD₅₀ for technical permethrin in rats of greater than 5000 mg/kg. Via the dermal route, it is not harmful, with a reported dermal LD₅₀ in rats of over 5000 mg/kg, and in rabbits of greater than 2000 mg/kg. The toxicity of permethrin is dependent on the ratio of the isomers present; the cis-isomer being more toxic.

Chronic toxicity: No adverse effects were observed in dogs fed permethrin at doses of 5 mg/kg/day for 90 days. Rats fed 150 mg/kg/day for 6 months showed a slight increase in liver weights.

Teratogenic effects: Permethrin is reported to show no teratogenic activity.

Mutagenic effects: Permethrin is reported to show no mutagenic activity.

Carcinogenic effects: At high dose levels, permethrin caused an increased incidence of tumours in mice in the liver and lungs. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use.

Reproductive effects: Permethrin did not cause reproductive toxicity in a two-generation study in rats.

Repeated dose toxicity: Permethrin did not cause specific target organ toxicity in experimental animal studies.

Fate in humans and animals: Permethrin is efficiently metabolised by mammalian livers. Breakdown products, or "metabolites," of permethrin are quickly excreted and do not persist significantly in body tissues. When permethrin is administered orally to rats, it is rapidly metabolized and almost completely eliminated from the body in a few days. Only 3 to 6% of the original dose was excreted unchanged in the faeces of experimental animals. Permethrin may persist in fatty tissues. Permethrin does not block, or inhibit, cholinesterase enzymes.

Classification of Hazardous Ingredients

Ingredient Risk Phrases. There is no data to hand indicating any particular target organs.

Section 12 - Ecological Information

Effects on birds: Permethrin is practically non-toxic to birds. The oral LD₅₀ for a permethrin formulation is greater than 9900 mg/kg in mallard ducks, greater than 13,500 mg/kg in pheasants, and greater than 15,500 mg/kg in quail.

Effects on aquatic organisms: Aquatic ecosystems are vulnerable to the impact of permethrin. The 96-hour LC₅₀ of permethrin is 0.0076 mg/L for *Poecilia reticulata* (guppy). The 48-hour EC₅₀ is 0.00017 mg/L for *Daphnia magna* (Water flea). The 96-hour EC₅₀ is 0.497 mg/L for *Raphidocelis subcapitata* (freshwater green alga).

Effects on other organisms: Permethrin is toxic to bees.

ENVIRONMENTAL FATE

Breakdown in soil and groundwater: Permethrin is of low to moderate persistence in the soil environment, with reported half-lives of 30 to 38 days. Permethrin is readily broken down, or degraded, in most soils. Soil micro-organisms play a large role in the degradation of permethrin. Because permethrin binds very strongly to soil particles and is nearly insoluble in water, it is not expected to leach or to contaminate groundwater. K_{oc} of Permethrin is 100000.

Breakdown in water: The results of one study near estuarine areas showed that permethrin had a half-life of less than 2.5 days. When exposed to sunlight, the half-life was 4.6 days. Permethrin degrades rapidly in water. There was a gradual loss of toxicity after it aged for 48 hours in sunlight at 0.05 mg/L in water.

Breakdown in vegetation: Permethrin is not phytotoxic, or poisonous, to most plants. No incompatibility has been observed with permethrin on cultivated plants.

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Section 13 - Disposal Considerations

Disposal: Triple or preferably pressure rinse containers before disposal. Dispose of rinsings in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots. 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 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 government regulations. DO NOT burn empty containers or product.

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good by ADG, IATA or IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

IATA: Non-hazardous for air transport.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

If there is any conflict between this SDS and the registered label, instructions on the label prevail.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
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 fire-fighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
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.

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Issued by: Ensyslex Australasia Pty Ltd

Phone: 13 35 36 (ALL HOURS)

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