

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

GHS Product identifier: Pharmachem Flyscreen Pour-on Insecticide for Horses
Other means of identification: Flyscreen for Horses
Recommended use of the product and restrictions on use: For the control of susceptible Buffalo Fly (*Haematobia irritans exigua*), Stable Fly (*Stomoxys calcitrans*) and sandflies *Culicoides* spp.) on horses. Aids in the treatment of Queensland Itch
Supplier's Details: Pharmachem Australia Pty Ltd
 Unit 6, 70 Fison Ave West
 Eagle Farm QLD 4009
 Telephone: (07) 3868 0333

Emergency phone number: 13 11 26 (Poisons Information Hotline)

SECTION 2 HAZARDS IDENTIFICATION

Classification of Product:
 This product is classified as a health hazard and an aquatic hazard in accordance with the following classification criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Eighth Revised Edition.

Health hazard: Permethrin 25:75
 Skin sensitisation Category 1

GHS label elements, including precautionary statements:

Pictogram:



Signal word: Warning
Hazard statement: May cause an allergic skin reaction

Precautionary statement

Prevention: Wear protective gloves and clothing.

Response: If on skin wash with plenty of soap and water.
 If skin irritation or rash occurs get medical advice.
 Wash contaminated clothing before re-use.

Environmental Hazard: Permethrin 25:75
 Aquatic toxicity

Acute aquatic toxicity Category 1

GHS label elements, including precautionary statements:

Pictogram:



Signal word: Warning

 Hazard statements: Very toxic to aquatic life
 Precautionary statements:
 Prevention: Read label before use.
 Avoid release to the environment.
 Response: Collect spillage

Chronic aquatic toxicity Category 1
 GHS label elements, including precautionary statements:
 Pictogram:



Signal word: Warning
 Hazard statements: Very toxic to aquatic life with long lasting effects.
 Precautionary statement
 Prevention: Read label before use.
 Avoid release to the environment.
 Response: Collect spillage

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	Cas No.	Proportion % w/v
Permethrin 25:75	52645-53-1	8.7
Mineral oil	8042-47-5	70 – 80
Proprietary non-hazardous ingredients		<10

SECTION 4 FIRST AID MEASURES

The following First Aid directions for Flyscreen have been published by the APVMA in the FAISD Handbook (see References):

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126.

However, the following additional information is provided for assistance in emergency circumstances while implementing the first aid directions above.

Eye Contact: Remove contact lens if worn. Flush with water for 15 minutes.
 Skin Contact: Wash the area with water.
 Ingestion: Do not induce vomiting as aspiration of the product might occur.
 Drink large amounts of water.
 Inhalation: Not expected under normal usage conditions. However the following actions can be taken if necessary. Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media: Alcohol foam, dry chemical, carbon dioxide and water spray.
 Hazards from combustion products: May emit toxic fumes.
 Special protective precautions and equipment for fire fighters: Use precautions and equipment suitable for the surrounding fire.

Hazchem Code: None allocated

SECTION 6 ACCIDENTAL RELEASE MEASURES

Emergency procedures:

Slippery when wet. Contain spill using inert absorbent material. Collect and seal contained, absorbed material in chemical waste containers for disposal.

Methods and materials for containment and clean up

Use absorbent material such as soil, sand or vermiculite. Wash area down with detergent and excess water. Do not allow wash water to enter sewers drains or waterways. Contain wash water as for spilled material.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling:

The following Safety Directions have been published by the APVMA in the FAISD Handbook:

May irritate the eyes. Avoid contact with the eyes. Wash hands after use.

Conditions for safe storage, including any incompatibilities:

Store below 30°C (Room Temperature) in a cool, dry place. Keep container closed when not in use.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

National exposure standards:	None allocated
Biological limit values:	None set
Engineering controls:	Use with adequate ventilation
Personal protective equipment:	Safety glasses and gloves may be worn.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber coloured liquid
Specific Gravity:	0.83 - 0.88
Viscosity:	15 – 30 cP

SECTION 10 STABILITY AND REACTIVITY

Chemical stability:	Stable
Conditions to avoid:	Keep away from heat, flame and incompatibles.
Incompatible materials:	Strong oxidising agents and bases
Hazardous decomposition products:	Oxides of nitrogen and carbon may be produced under fire conditions.
Hazardous reactions:	Hazardous polymerisation will not occur

SECTION 11 TOXICOLOGICAL INFORMATION

Routes of Exposure:

Exposure to Flyscreen can occur through ingestion and eye or skin contact. The major routes of exposure are expected to be eye and skin contact. There are no toxicology data available for Flyscreen. Information has been provided for permethrin. Other ingredients contribute minimally to the toxicity of the formulation.

Signs and symptoms of exposure:

Oral:	Not known
Eyes:	Not known
Skin:	Not known
Inhalation:	Not applicable
Sensitizing:	May cause an allergic skin reaction

Summary of Toxicology:

Permethrin can induce skin sensations and paraesthesia in exposed workers, which develop after a latent period of approximately 30 min, peak by 8 h and disappear within 24 h. Numbness, itching, tingling, and burning are symptoms frequently reported. No poisoning cases have been reported.

The likelihood of oncogenic effects in human beings is extremely low or non-existent.

There are no indications that permethrin has an adverse effect on human beings when used as recommended.

Acute toxicity:

Oral (LD ₅₀) (Rat):	430 – 1200 mg/kg BW
Oral (LD ₅₀) (Mouse):	540 – 650 mg/kg BW

SECTION 12 ECOLOGICAL INFORMATION

The following environmental statement is required on the label of the product as a result of the assessment of the product for registration by the APVMA:

Dangerous to fish. Do not contaminate dams, rivers, streams, drains or waterways with the chemical or used containers.

In laboratory tests, permethrin has been shown to be highly toxic for aquatic arthropods, LC₅₀ values ranging from 0.018 µg/litre for larval stone crabs to 1.26 µg/litre for a cladoceran. It is also highly toxic for fish, with 96-h LC₅₀ values ranging from 0.62 µg/litre for larval rainbow trout to 314 µg/litre for adult rainbow trout. The no-observed-effect level for early life stages of the sheepshead minnow over 28 days is 10 µg/litre and the chronic no-effect level for fathead minnow is 0.66-1.4 µg/litre. Permethrin is less toxic to aquatic molluscs and amphibia, 96-h LC₅₀ values being >1000 µg/litre and 7000 µg/litre, respectively.

In field tests and in the use of the compound under practical conditions, this high potential toxicity is not manifested. An extensive literature exists on the effects of using permethrin in agriculture, forestry, and in vector control in many parts of the world. Some aquatic arthropods are killed, particularly when water is over-sprayed but the effects on populations of organisms is temporary. There have been no reports of fish killed in the field. This reduced toxicity in the field is related to the strong adsorption of the compound to sediments and its rapid degradation. Sediment-bound permethrin is toxic to burrowing organisms but this effect also is temporary.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods and containers:

The following disposal directions for containers have been approved by the APVMA:

Small containers:

Dispose of empty container by wrapping with paper and putting in garbage.

Large containers:

Triple-rinse container into the medicated water, dip, drench, etc. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean container to recycler or designated collection point. If not recycling,

break, crush, or puncture container and deliver to an approved waste management facility. If an approved waste management facility is not available, bury the broken, crushed or punctured containers 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

In addition, do not burn empty containers or unused product. Unused product may be disposed of in local municipal landfill.

Special precautions for landfill or incineration:

Seek advice from local government authority before disposing of unused product in municipal landfill.

SECTION 14 TRANSPORT INFORMATION

Not defined as Dangerous Goods by the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

SECTION 15 REGULATORY INFORMATION

This product has been registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). In granting registration to any product, the APVMA has exercised its legislative responsibility to ensure that the product is suitably formulated and properly labelled and, when used according to instructions is:

- safe to the host, the user, consumers and the environment;
- efficacious (that is, the product does the job it claims it shall do); and
- not unduly prejudicial to trade.

The APVMA uses the services of a number of Australian and State government agencies as advisers to help with some of these evaluations of applications for registration of agricultural and veterinary chemical products. These include:

- the Office of Chemical Safety (OCS) of the Commonwealth Department of Health which:
 - evaluates and reports on toxicology and metabolism studies; proposes first aid and safety directions; determines poison schedule classifications; and establishes acceptable daily intakes (ADIs) and acute reference doses (ARfD); and
 - evaluates the occupational health and safety aspects of an application and recommends safety directions and occupational controls on use and advises on a Safety Data Sheet (SDS);
- the Commonwealth Department of Agriculture, Water and the Environment which evaluates environmental data and recommends appropriate use controls and instructions for the product that will protect the environment; and
- State and Territory departments responsible for agricultural and primary industries which evaluate and reports on efficacy and target crop or animal safety data for new agricultural chemicals and new uses of registered products. In some cases, the APVMA contracts this work out to other agencies such as universities, the CSIRO or to other experts.

All ingredients appear in the Australian Inventory of Chemical Substances (AICS) and can be manufactured or imported into Australia for commercial purposes without notifying AICIS (Australian Industrial Chemicals Introduction Scheme) first, provided the Australian importer/manufacture is currently registered under the AICIS.

This product is a Schedule 5 poison in accordance with the provisions of the Standard for the Uniform Scheduling for Medicines and Poisons (SUSMP) and is labelled in accordance with those provisions.

SECTION 16 OTHER INFORMATION

References:

1. FAISD Handbook, Handbook of First Aid Instructions, Safety Directions, Warning Statements, and General Safety Precautions for, Agricultural and Veterinary Chemicals, (as updated), APVMA (Australian Pesticides and Veterinary Medicines Authority), <https://apvma.gov.au/node/26586>
2. Code of Practice – Preparation of safety data sheets for hazardous chemicals, Safe Work Australia, May 2018, <https://www.safeworkaustralia.gov.au/doc/model-code-practice-preparation-safety-data-sheets-hazardous-chemicals>
3. Australian Inventory of Industrial Chemicals (as updated), AICIS (Australian industrial Chemicals Introduction Scheme), Australian Government Department of Health, <https://www.industrialchemicals.gov.au/search-inventory>
4. APVMA Registrations and Permits, <https://apvma.gov.au/node/1060>
5. ADI [Acceptable Daily Intake] List (as updated), Commonwealth Department of Health, TGA (Therapeutic Goods Administration), https://apvma.gov.au/sites/default/files/publication/74511-acceptable_daily_intakes_adi_for_agricultural_and_veterinary_chemicals_used_in_food_producing_crops_or_animals_-_edition_4_2020.pdf
6. The Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code), Edition 7.7, 2020, https://www.ntc.gov.au/sites/default/files/assets/files/ADG%20Code%207.7_0.pdf
7. SUSMP (Standard for the Uniform Scheduling of Medicines and Poisons) (as updated), Chemicals and Medicines Scheduling Secretariat (MD122), Scheduling and Committee Governance, TGA, Commonwealth Department of Health, <https://www.tga.gov.au/publication/poisons-standard-susmp>
8. Hazardous Chemical Information System (HCIS), Safework Australia (as updated), <http://hcis.safeworkaustralia.gov.au/>
9. Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Eighth Revised Edition, United Nations, New York and Geneva, 2019, <https://unece.org/ghs-rev8-2019>
10. NIOSH Pocket Guide to Chemical Hazards
11. Chemical Classification and Information Database (CCID) (as updated), New Zealand Environmental Protection Authority, <http://www.epa.govt.nz/search-databases/Pages/HSNO-CCID.aspx>
12. National Institutes of Health (NIH), National Center for Biotechnology Information, Pubchem database, <https://pubchem.ncbi.nlm.nih.gov/compound/Permethrin>
13. International Programme on Chemical Safety, Environmental Health Criteria 94, Permethrin, UNEP, ILO, WHO, Geneva, 1990, <http://www.inchem.org/documents/ehc/ehc/ehc94.htm>
14. Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products, Evaluation of active substances, Assessment Report, Permethrin, Product-Type 18 (Insecticides, acaricides and products to control other arthropods), Rapporteur: Ireland, April 2014, http://dissemination.echa.europa.eu/Biocides/ActiveSubstances/1342-18/1342-18_Assessment_Report.pdf

All information contained in this Safety Data Sheet is as accurate and up to date as possible. Since Pharmachem cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Pharmachem will not be responsible for damages of any nature resulting from use of or reliance upon the information. No expressed or implied warranties are given other than those implied as mandatory by Commonwealth State or Territory legislation.