

PRODUCT INFO
& DATASHEET

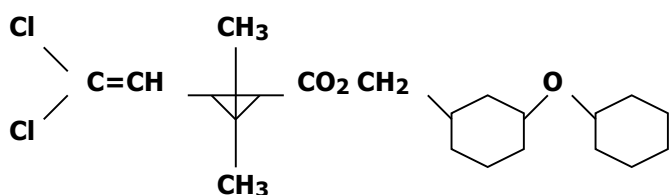
SICOPERM 4% POUR-ON

Permethrin 4% pour-on
Insecticide for control of animal ectoparasites
(for external pour-on usage)

NOMENCLATURE

Permethrin is the BSI / ISO approved name for: 3-phenoxybenzyl (1RS, 3RS; 1RS, 3SR)-3-(2,2-dichloro = vinyl)-2,2-dimethyl-cyclopropanecarboxylate (IUPAC)

FORMULA



Molecular weight: 391.3G

$C_{21}H_{20}Cl_2O_3$

CAS number: 52645-53-1

PHYSICAL AND CHEMICAL PROPERTIES OF THE ACTIVE INGREDIENT

Appearance	:	Colourless solid (technical is a yellow-brown viscous liquid)
Melting point	:	34 - 39°C_Boiling point: 200 EC/0.1 mmHg
Density	:	1.19 - 1.27 (at 20°C)
Octanol/water K_{ow}	:	$\log P_{ow} = 6.5$
Solubility in water	:	0.2 mg/l (30 EC)
Solubility in organic	:	Xylene, Hexane > 1000, Methanol, solvents 258 (g/kg at 25°C)
Stability	:	Stable to U.V. light and temperatures up to 200°C

PROPERTIES OF FORMULATION

For external pour-on usage. A clear solution containing Permethrin 4% w/v (cis:trans 75:25)

TOXICOLOGY OF ACTIVE INGREDIENT

Acute Oral LD50 :	Rat :	430 - 4,000 mg/kg
Acute Oral LD50 :	Mouse:	540 - 4,000 mg/kg
Acute Dermal LD50:	Rat:	> 2,500 mg/kg
Acute Dermal LD50:	Rabbit:	> 2,000 mg/kg
Acute inhalation LC50 3-h:	Rat:	> 685 mg/m ³

Mild eye and skin irritant (rabbits), moderate skin sensitiser (guinea pigs).

NOEL (2-year) feeding trials, rats receiving 100 mg/kg diet showed no ill-effects.

Acceptable Daily Intake = 0.05 mg/kg bodyweight.

ECO-TOXICOLOGY OF ACTIVE INGREDIENT

The toxicity of Permethrin for birds is low

Acute Oral LD50:	Japanese quail:	> 13,500 mg/kg
Acute Oral LD50:	Chicken:	> 3,000 mg/kg

Permethrin is highly toxic to many fish and aquatic invertebrate species

Fish Toxicity LC50 (96-h): Rainbow Trout: 2.5 μ g/l

Aquatic Toxicity LC50 (48-h): Daphnia sp.: 0.6 μ g/l

Permethrin is toxic to bees

Bee Toxicity LD50(24-h):

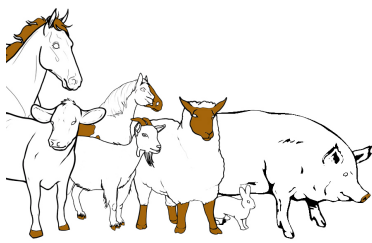
0.098 μ g/bee (oral)

0.029 μ g/bee (oral)

Any information in this publication is believed to be accurate and is given in good faith, but is for the customer to satisfy himself of the suitability for his own particular purpose. No representation, warranty or guarantee is made to its accuracy, reliability or completeness.

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RECOMMENDATIONS FOR USE

For the control of flies and lice on cattle. Sicoperm 4% pour-on is particularly effective against biting flies and horn flies. Also sucking and biting lice.

Dosage and administration

The product is in ready for use form and should be applied at a dosage rate of 1 ml/10 kg bodyweight.

<u>Bodyweight (kg)</u>	<u>Dose volume (ml)</u>
Calves up to 100	10
101 to 200	20
201 to 300	30
Over 300	40

"Sicoperm 4% pour-on" can be applied using the incorporated measure. Approximately a quarter of the calculated dose should be applied to the top of the head; remainder should be poured along the neck and mid-backline.

Flies : A single dose is normally sufficient to control flies for up to 8 weeks. The first treatment should be carried out when the numbers of flies start to increase. In cases of heavy infestation, the dose may be repeated at 4 weeks intervals.

Lice : A single dose is normally sufficient to control all lice. In certain conditions of heavy challenge, the dose may be repeated after 4 weeks.

FURTHER INFORMATION

Fly Control : As with all insecticides the degree of fly killing activity afforded by Sicoperm 4% pour-on is influenced by prevailing weather conditions and the species of flies involved.

Louse control : Louse efficacy will not be affected by prevailing weather conditions.

Contra-indication : Do not treat calves under one week old.

WARNING : FOR EXTERNAL USE ONLY.

PRECAUTIONS

Protection of operators

Use as recommended should not present a hazard to operators provided they observe the following precautions:

- Wear protective clothing, rubber gloves and boots when applying the product.
- Wash splashes from skin and eyes immediately.
- When using the product do not eat, drink or smoke.
- Wash hands and exposed skin before eating, drinking or smoking after work.
- Apply the product in a well ventilated area, preferably in the open air. Do not inhale the vapour.

Protection of consumers

Animals must not be slaughtered for human consumption until 3 days after the last treatment. Cattle producing milk for human consumption should be treated immediately after milking to allow as long an interval as possible (at least 6 hours) before the next milking. There is no need to withhold milk from subsequent milkings.

Protection of livestock, wildlife and others

The use of this product should not present a hazard to livestock, wildlife or others provided the following precautions are followed:

- Harmful to fish. Do not contaminate ponds, waterways or ditches with the product or used container.

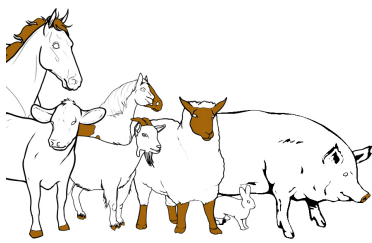
SAFETY IN USE

- This product is classed as potentially harmful if swallowed; and also irritating if in contact with eyes and skin.
- Wear suitable protective clothing (coveralls), synthetic rubber / PVC gloves when using eye protection when diluting.
- Avoid excessive contamination of coveralls and launder regularly.
- Wash splashes from skin and eyes immediately.
- Wash hands and exposed skin before meals and after use.
- Do not breathe fog or spray mist. Otherwise wear respiratory protective equipment and eye protection.

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- Flammable. Avoid naked flames and hot surfaces.
- When using, do not eat, drink or smoke.
- Unprotected persons and animals should be kept away from treated areas. Cover water storage tanks before application.
- Do not contaminate foodstuffs, eating utensils or food contact surfaces.
- Cover water storage tanks before application.
- Do not apply directly onto animals.
- Extremely dangerous to fish and other aquatic life. Remove or cover fish tanks and bowls before application.
- Avoid all contact with plant life.

STORAGE, SPILLAGE & DISPOSAL

Keep in original container, tightly closed in a safe place. Keep out of reach of children. Keep away from food, drink and animals feeding stuffs.

If a spillage occurs, absorb with a suitable absorbent material such as damp sawdust, sand or earth. Sweep up and place in a sealed container until safe disposal is possible.

Wash out containers thoroughly, emptying washings into the spray tank. The containers can then be disposed off by incineration at high temperatures or by crushing and burying in an approved site. Dispose of container according to local regulations. Do not re-use the container for any other purpose.

FIRST AID PROCEDURES

In cases of over-exposure, a wide range of symptoms can be observed, including signs of excitation, muscular spasms, twitching and muscular fibrillation, headache, weakness, giddiness, nausea, vomiting, stomach pains, blurred vision, slurred speech and in cases of severe over-exposure, respiratory and circulatory failure may occur.

If on skin; wash the affected areas immediately with soap and clean water.

If in eyes; flush with sterile distilled water or saline solution for at least 15 minutes.

If inhaled; move the patient to clean fresh air and monitor for symptoms of adverse reactions to the product.

If ingested; DO NOT induce vomiting: seek urgent medical advice and show this container or label. Vomiting may cause aspiration pneumonia. Gastric lavage may aid the aspiration of the product, but should only be administered by medical staff.

IF YOU FEEL UNWELL, seek urgent medical attention, showing the product label.

NOTES TO PHYSICIANS

There is no specific antidote to Permethrin and treatment is symptomatic.

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