

ARETOR®

INSECTICIDE FOR TREE MICRO INJECTION

An insecticide for tree micro injection to control a range of pest in trees and palms as per the Directions for Use.

Other liquids to applied undiluted (AL)

ACTIVE INGREDIENTS:

Enamectin benzoate	9.7% w/w
Other ingredients	90.3% w/w
Total	100%

CAUTION

**KEEP LOCKED AWAY AND OUT OF REACH OF CHILDREN.
READ THE LABEL BEFORE OPENING OR USING**

FOR PROFESSIONAL USE ONLY

NET CONTENT: 1 Liter

Imported By:

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Date of Manufacture:

Date of Expiry:

Expiry date is 2 years from manufacturing date

Emergency Hotline Number

Please call +65 6334 4366 (24 hours)

Product names marked ® or ™, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company



SAFETY PRECAUTIONS

AVOID any contact of skin, eyes or clothing with the product. DO NOT breathe into the product container. DO NOT eat, drink or smoke while handling the product, wash hands and face before doing so. If any indisposition occurs, stop work, follow first aid measures, and call a physician. AFTER USE, Wash hands and face. Wash contaminated clothing before re-use. Do not contaminate water with product or its container. Do not empty into drains

GENERAL INSTRUCTIONS

ARETOR® is an insecticide for use as TreeCare Micro Injection (TMI) to control a range of pest in trees and palms.

DIRECTIONS FOR USE

ARETOR® should be applied un-diluted into trunks of trees / palms by micro injection through drill holes into the xylem of the tree, using Syngenta injection equipment. For Rain Tree, the amount of product to be injected per hole drilled is 5 mL

Tree species	Target organism(s)	Maximum ARETOR to be injected per tree (mL)	Application Method
Rain trees (<i>Samanea saman</i>)	Caterpillars (<i>Polydesma</i> spp.)	Depending on the girth size of the tree, please refer to table below	Tree Micro Injection (TMI) (Syngenta equipment)

Number of injection holes per tree: The total number of holes to be drilled per tree depends on the diameter of the tree. This is determined indirectly by measurement of the girth of the tree at breast height (GBH). From there the theoretical Diameter at Breast Height (DBH) is calculated. Diameter at Breast height is defined as 1.37m above the ground on the uphill side of the tree.
The range given dose rates is for trees from 28 to 62 cm DBH.

Volume of ARETOR® to be injected to the tree and corresponding holes to be drilled for application

Calculated tree diameter (Diameter at Breast Height [DBH]) (cm)	Number of holes to be drilled	Volume of ARETOR® to be injected per drilled hole (ml)	Volume of ARETOR® to be injected per tree (ml)
13 – 17	3	5	15
18 – 22	4		20
23 – 27	5		25
28 – 32	6		30
33 – 37	7		35
38 – 42	8		40
43 – 47	9		45
48 – 52	10		50
53 – 57	11		55
58 – 62	12		60

Drill Holes: Holes are drilled (drill bit 10 mm diameter) slightly slanting, close to the ground into the active sapwood of root flares. The injection points are distributed evenly around the stem.

Plugs: Syngenta biodegradable plugs are inserted into each injection hole. These plugs seal the drilled hole and allow for safe injection of Aretor into the tree.

Injection Equipment: TreeCare Micro Injection is applied with devices that meet the label and dose requirements [(for example, Syngenta TMI system)] for the control of listed pests of trees and palms as stated in table below. Follow manufacturer's directions for equipment use.

Crop	Target	Appl. rates (ml product / cm DBH*)	Persistence	Timing of application
Coniferous trees	Pinewood Nematode (<i>Bursaphelenchus xylophilus</i>)	0.3-1.4	2-5 years	Winter, spring until Monochamus adult starts flying
	Pine processionary moth (<i>Thaumetopoea pityocampa</i>)	0.4	3-4 years	Up to 2 nd instar larvae (Aug. – Nov.)
	Pine tip moth (<i>Rhyacionia zozana</i>)	0.4	1 year	
	Pine caterpillar (<i>Dendrolimus superans</i>):	0.3	1 year	
	Pine mealy bugs	0.3	1 year	
Dicot trees	Emerald Ash Borer (Herms) (<i>Agilus planipennis</i>)	1.6	2 years	
	Asian longhorn beetle (<i>Anoplophora glabripennis</i>)	1.6-2.4	2 years	
	Eucalyptus longhorn beetle (<i>Phoracantha spp</i>)	1.6	2 years	
	Horse chestnut leafminer (<i>Cameraria ohridella</i>)	0.4-0.8	3-4 years	Spring/summer after flowering
	Oak Processionary moth (<i>Thaumetopoea processionea</i>)	0.4-0.8	2 years	Up to 2 nd instar larvae (Apr. - May)
	Gipsy moth (<i>Lymantria dispar</i>)	1.6	1 year	
	<i>Sophora japonica</i> (<i>Cydia trasias</i>)	0.8-1.6	1 year	
	Rain tree caterpillars (<i>Polydesma spp.</i>)	1	1 year	Tropical; any time during the year
	Sycamore lace bug (<i>Corythucha ciliata</i>)	1	1-2 years	
	Fall web worm (<i>Hyphantria cunea</i>)	1	1-2 years	
Ornamental and Date Palms	Red Palm Weevil (<i>Rhynchophorus ferrugineus</i>)	21-42 ml / palm	6-12 months	Spring/summer after flowering Date palm: PHI of 3 months

Palms

ARETOR® is applied through 4 injection holes / palm (2 injection holes in canary palms if stem higher than 8 m). Holes are drilled at the base of the trunk, close as possible to the ground, with a 6 mm diameter drill bit, slightly slanting (10-15 degree angle), to a depth of 1/3 of central cylinder diameter, which is usually around 15-30 cm below stem surface. Drill points are placed at different heights around the stem (not on same plane). The product is injected through a needle (2 bars), which is inserted into the bore hole and sealing the port. After injection and withdrawal of the needle, holes are sealed by insertion of biodegradable plugs.

Application Technique / Parameters

SHAKE WELL BEFORE USE.

For use through a Syngenta TreeCare Micro Injection System only

Cleaning

Always thoroughly clean the equipment after use

Restricted Entry Intervals:

No waiting period following application is required since no exposure to operators, general public or domestic animals is likely given: Closed application system and sealed injection ports.

First Aid Measures

**If poisoning occurs, contact a doctor or Poisons Information Center
Emergency Hotline Number: +65 63344366 (24 Hours)**

- If on skin or clothing:
 - Take off all contaminated clothing immediately.
 - Wash off immediately with plenty of water.
 - If skin irritation persists, call a physician.
 - Wash contaminated clothing before re-use.
- If in eyes:
 - Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
 - Remove contact lenses.
 - Immediate medical attention is required
- If inhaled:
 - Move the victim to fresh air.
 - If breathing is irregular or stopped, administer artificial respiration.
- If swallowed
 - Do NOT induce vomiting
 - Administer medicinal charcoal, earth etc. in plenty of water
 - Seek medical advice immediately and show this container or label.

Antidote: There is no specific antidote available. Treat symptomatically.

STORAGE

DO NOT contaminate water, food, or feed by storage and disposal.

Store in the closed, original container in a cool, well ventilated area. DO NOT store for prolonged periods in direct sunlight.

Keep out of the reach of children. Keep away from food, drink and animal feed.

DISPOSAL

Empty containers should be returned to the distributor

Fill the empty container with 250 mL of water. Close the container and shake for 30 seconds. Empty the container again and repeat the same procedure 3 times. DO NOT dispose of undiluted chemicals on site. If not recycling, triple rinse, break, crush or puncture and deliver empty packaging for appropriate disposal at an approved waste management facility. DO NOT burn empty containers or product.

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS
AUTHORISED UNDER APPROPRIATE LEGISLATION**

Restraints

For use only as TreeCare Micro Injection (TMI) product. ARETOR® should be applied using specialized TreeCare Micro Injection equipment such as the Syngenta TreeCare Micro Injection kit.
DO NOT use as a spray or soil treatment

Resistance Management

Emamectin acts as GABA agonists and binds to the GABA receptor complex: this results in channel opening, hence mimicking the action of the inhibitory neurotransmitter GABA. Emamectin has a unique physiological mode of action, reducing the possibility of cross-resistance to other classes of chemistry.
Do not use against pests resistant to avermectins/milbemycins (IRAC group 6: Chloride channel activators).

Protection of wildlife, fish, crustaceans and environment

Dangerous to fish and other aquatic organisms. DO NOT contaminate streams, rivers or waterways with the chemical or used container. DO NOT empty in drains. Very toxic to bees. Do not apply or allow the product to drift to plants in bloom if bees are actively foraging in the treated area. However, the mode of application for ARETOR® is only by tree micro-injection, which avoids any drifts which is different from the conventional application methods. Based on the available data, there is minimal risk to pollinators from injection of ARETOR® into bee attractive trees. However, as a safety measure, it is recommended to inject bee attractive trees only after bloom and active foraging period is complete.

KEEP LOCKED AWAY AND OUT OF REACH OF CHILDREN AND OTHER UNAUTHORISED PERSONS, AND ANIMALS.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFF.

MATERIAL SAFETY DATA SHEET

If additional hazard information is required, refer to the Material Safety Data Sheet. For a copy phone +65 6333 6400

DISCLAIMER

This product complies with the specifications in its statutory registration. Implied terms and warranties are excluded. Syngenta's liability for breach of the express or any non-excludable implied warranty is limited to product replacement or purchase price refund. The purchaser must determine suitability for intended purpose and take all proper precautions in the handling, storage and use of the product including those on the label and/or safety data sheet failing which Syngenta shall have no liability.