

Product Name: NAADCO ABAMECTIN 18 EC INSECTICIDE / MITICIDE
APVMA Approval No: 93923/145288



Label Name:	NAADCO ABAMECTIN 18 EC INSECTICIDE / MITICIDE
-------------	---

Signal Headings:	POISON KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENING OR USING
------------------	---

Constituent Statements:	18 g/L ABAMECTIN 100 g/L N-METHYL-2-PYRROLIDONE 481 g/L LIQUID HYDROCARBON
-------------------------	--

Mode of Action:	GROUP 6 INSECTICIDE
-----------------	---------------------

Statement of Claims:	For the control of pest mites on pears, apples, tomatoes, citrus, hops, strawberries and ornamentals. For the control of pest mites and native budworm on cotton. As specified in the Directions for Use table.
----------------------	---

Net Contents:	1 L - 1000 L
---------------	--------------

Restraints:	DO NOT use if rainfall is expected before spray has dried as reduced efficacy may result. DO NOT overhead irrigate within 24 hours after application. SPRAY DRIFT RESTRAINTS Specific definitions for terms used in this section of the label can be found at apvma.gov.au/spraydrift DO NOT allow bystanders to come into contact with the spray cloud. DO NOT apply in a manner that may cause an unacceptable impact to native vegetation, agricultural crops, landscaped gardens and aquaculture production, or cause contamination of plant or livestock commodities, outside the application site from spray drift. Wherever possible, correctly use application equipment designed to reduce spray drift and apply when the wind direction is away from these sensitive areas. DO NOT apply unless the wind speed is between 3 and 20 kilometres per hour at the application site during the time of application. DO NOT apply if there are hazardous surface temperature inversion conditions present at the application site during the time of application. Surface temperature inversion conditions exist most evenings 1 to 2 hours before sunset and persist until 1 to 2 hours after sunrise.
-------------	---

Directions for Use:	This section contains file attachment.
---------------------	--

Other Limitations:	
--------------------	--

Withholding Periods:	<p>COTTON: DO NOT HARVEST FOR 20 DAYS AFTER APPLICATION. DO NOT GRAZE CUT FOR STOCK FOOD FOR 20 DAYS AFTER APPLICATION.</p> <p>APPLES, PEARS: DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION. DO NOT FEED TREATED PRODUCE TO LIVESTOCK FOR 14 DAYS AFTER APPLICATION.</p> <p>CITRUS: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.</p> <p>HOPS: DO NOT HARVEST, GRAZE OR CUT FOR STOCKFOOD FOR 4 WEEKS AFTER APPLICATION.</p> <p>STRAWBERRIES, TOMATOES: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION. DO NOT FEED TREATED PRODUCE TO LIVESTOCK FOR 3 DAYS AFTER APPLICATION.</p> <p>ORNAMENTALS: DO NOT CUT OR GRAZE FOR STOCK FOOD.</p>
----------------------	---

Trade Advice:	
---------------	--

General Instructions:	This section contains file attachment.
-----------------------	--

Resistance Warning:	<p>GROUP 6 INSECTICIDE</p> <p>For insecticide resistance management NAADCO Abamectin 18 EC Insecticide / Miticide is a Group 6 insecticide. Some naturally occurring insect biotypes resistant to NAADCO Abamectin 18 EC Insecticide / Miticide and other Group 6 insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if NAADCO Abamectin 18 EC Insecticide / Miticide or other Group 6 insecticides are used repeatedly. The effectiveness of NAADCO Abamectin 18 EC Insecticide / Miticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use NAADCO accepts no liability for any losses that may result from the failure of NAADCO Abamectin 18 EC Insecticide / Miticide to control resistant insects. NAADCO Abamectin 18 EC Insecticide / Miticide may be subject to specific resistant management strategies.</p> <p>Therefore, NAADCO Abamectin 18 EC Insecticide / Miticide should not be applied more than the following number of times per season/crop and should not be used consecutively except where a two-spray schedule is specifically recommended.</p> <p>Apples, Pears, Citrus, Hops: one spray per season Tomatoes: two sprays per crop if mites are present, or five sprays per crop if mites are not present Cotton, Strawberries, Ornamentals: two sprays per season</p> <p>Alternate NAADCO Abamectin 18 EC Insecticide / Miticide with approved miticides from other chemical groups. For further information contact your local supplier, NAADCO representative or local agricultural department agronomist.</p>
---------------------	---

Precautions:	<p>Re-Entry Period: Under field conditions the spray should be allowed to dry on the foliage before re-entry into</p>
--------------	---

	the treated areas. Do not allow entry into treated areas in the glasshouses for 24 hours after treatment. When entry prior to this time is necessary, wear cotton overalls buttoned to the neck and wrist and elbow length chemical resistant gloves.
--	---

Protections:	<p>PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS DO NOT apply under weather conditions, or from spraying equipment, that may cause spray drift onto nearby susceptible plants/crops, cropping lands or pastures.</p> <p>PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT Dangerous to fish and other aquatic organisms. DO NOT contaminate streams, rivers or watercourses with the chemical or used containers. Dangerous to bees. DO NOT spray any plants in flower while bees are foraging. Studies indicate that when abamectin comes into contact with soil it readily and tightly binds to the soil and becomes inactive over time.</p>
--------------	--

Storage and Disposal:	<p>STORAGE AND DISPOSAL (1L - 200L only) Store in the closed, original container in a dry, cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT use this container for any other purpose. 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.</p> <p>For refillable containers (1000L only) Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.</p>
-----------------------	--

Safety Directions:	<p>Poisonous if absorbed by skin contact or swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container, preparing spray and using prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length chemical resistant gloves and goggles. For space applications wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length chemical resistant gloves, goggles, half facepiece respirator with dust cartridge or canister. If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator and if rubber wash with detergent and warm water and contaminated clothing.</p>
--------------------	--

First Aid Instructions:	<p>If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766. If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor. If skin contact occurs, remove contaminated clothing and wash skin thoroughly. If swallowed, DO NOT induce vomiting.</p>
-------------------------	---

First Aid Warnings:	
---------------------	--

DIRECTIONS FOR USE

SITUATION	PEST	RATE	WITHHOLDING PERIOD	CRITICAL COMMENTS
Cotton	Two Spotted Mite (<i>Tetranychus urticae</i>), Carmin mite (<i>Tetranychus cinnabarinus</i>)	300mL/ha	20 days (harvest) 20 days (livestock/ grazing)	DO NOT make more than two applications to cotton per season, regardless of pest being controlled. Apply by ground spraying equipment or fixed wing aircraft in a minimum volume of 20L/ha. Good coverage is essential. Monitor crops regularly and apply as soon as the threshold mite number for your area has been reached. Best results will be obtained when applied to low mite populations. Applications to high populations may not give satisfactory control. Under these conditions a second miticide application 7-10 days later may be needed. DO NOT use more than twice in one season for mite control. Refer to notes on resistance under general instructions section of this leaflet.
	Native budworm (<i>Helicoverpa punctigera</i>)	300mL/ha or 600mL/ha		Use only when Lepton test kit results indicate no greater than 10% <i>Helicoverpa armigera</i> are present. Use the higher rate alone or the lower rate with a suitable mixing partner. Applications should be targeted at brown eggs and newly emerged larvae (neonates). Mixed size larval populations should be avoided. DO NOT use more than twice in one season for native budworm control. DO NOT make more than two applications to cotton per season, regardless of pest being controlled.
Apples, Pears	Two Spotted Mite (<i>Tetranychus urticae</i>), European Red Mite (<i>Panonychus ulmi</i>)	750mL/ha plus 5L/ha summer oil (See General Instructions for mixing rates.)	14 days (harvest) 14 days (livestock/ grazing)	Apply as dilute or concentrated sprays but in no less than 1000L/ha. Good coverage is essential. Use a high quality summer spraying oil and follow label instructions. For best results apply soon after mite numbers have reached the threshold for your area. Generally NAADCO Abamectin 18 EC Insecticide / Miticide takes about 7 days to reach maximum mite control. NAADCO Abamectin 18 EC Insecticide / Miticide will control moderate to high mite populations but, in the absence of predatory mites (see integrated Pest Management below), re-treatment with another miticide may be necessary. If re-treatment is required, use an approved miticide from a different chemical group. Refer to notes on resistance and crop safety under General Instructions section of this leaflet. Integrated Pest Control: The effects of NAADCO Abamectin 18 EC Insecticide / Miticide parasitic wasps

				and other beneficial insects in Australian orchards are not fully known. Studies have shown that after application of NAADCO Abamectin 18 EC Insecticide / Miticide, predatory mite populations may not increase for a number of weeks, due to a lack of suitable pest mite prey. Predatory mite numbers will increase with any increase in pest mite numbers allowing the continuation of biological mite control. DO NOT use in IPM programs unless the pest mite threshold has been reached and predators are unlikely to achieve effective control.
--	--	--	--	---

SITUATION	PEST	RATE	WITHHOLDING PERIOD	CRITICAL COMMENTS
Citrus	Brown Citrus Rust Mite (<i>Tegolophus australis</i>), Citrus Rust Mite (<i>Phyllocoptera oleivora</i>), Broad Mite (<i>Polyhagotarso nemus latus</i>)	12mL - 25mL/100L plus 250mL/100L summer oil	7 days (harvest)	Apply as pest pressure indicates as a dilute spray in 3000 to 6000L or water/ha. Use the higher rate under conditions of high pest pressure. Make no more than one application per season.
Hops	Two Spotted Mite (<i>Tetranychus urticae</i>)	1.0L/ha	4 weeks (harvest/grazing/ cut for stockfood)	Apply as pest pressure indicates) as a dilute spray in 1000 to 2000L Water/ha, depending on crop size. Make no more than one application per season.
Tomatoes trellised or staked	Two Spotted Mite (<i>Tetranychus urticae</i>)	High volume spraying: 300 – 450mL/ha NAADCO Abamectin 18 EC Insecticide / Miticide using concentrations	3 days (harvest) 3 days (livestock/ grazing)	Wet foliage to near the point of run-off. Thorough coverage and penetration into bushes is essential. Preferably apply before the build-up of mite numbers. If mite numbers exceed 5-6 mites per compound leaf, use the higher rate. Re-apply as pest numbers indicate. Allow at least 28 days between applications with NAADCO Abamectin 18 EC Insecticide / Miticide and do not use more than two NAADCO Abamectin 18 EC Insecticide / Miticide sprays per crop. Refer to notes on resistance under General Instructions section of this leaflet.
	Tomato Russet Mite (<i>Aculops lycopersici</i>)	of 60 - 90mL/100L		Apply as for Two Spotted Mite. The lower rate will control Tomato Russet Mite not apparent at spraying. Use the higher rate when Tomato Russet Mite is present at spraying or is the main pest.

	Tobacco Leafminer (Potato moth) (<i>Phthorimaea operculella</i>)	High volume spraying: 600mL/ha using concentrations of 120mL/100L		Wet foliage to near the point of run off. Thorough coverage and penetration into bushes is essential. Apply on the first sign of pests. Re-apply as pest numbers indicate or every 7-10 days with a maximum of 5 applications to the crop. If mites are also a problem DO NOT use more than two NAADCO Abamectin 18 EC Insecticide / Miticide sprays per crop. Refer to notes on Resistance under General Instructions section of this label. NB: Other IPM strategies to reduce leafminer populations should be employed.
Tomatoes Field grown (not trellised)	Two Spotted Mite (<i>Tetranychus urticae</i>)	300 – 450mL/ha	3 days (harvest) 3 days (livestock/ grazing)	Apply in sufficient volume to obtain even coverage and penetration of plants. Use droppers to direct spray onto plants and away from the inter-row. Preferably apply before the build-up of mite numbers. If mite numbers exceed 5 mites per compound leaf, use the higher rate. Re-apply as pest numbers indicate. Allow at least 28 days between applications with NAADCO Abamectin 18 EC Insecticide / Miticide and DO NOT use more than two NAADCO Abamectin 18 EC Insecticide / Miticide sprays per crop. Refer to notes on Resistance under General Instructions section of this leaflet.
	Tomato Russet Mite (<i>Aculops lycopersici</i>)			Apply as for Two Spotted Mite. The lower rate will control Tomato Russet Mite not apparent at spraying. Use the higher rate when Tomato Russet Mite is present at spraying or is the main pest.
	Tobacco Leafminer (Potato moth) (<i>Phthorimaea operculella</i>)	600mL/ha		Apply in sufficient volume to obtain even coverage and penetration of plants. Use droppers to direct spray onto plants away from the inter-row. Apply on the first sign of pests. Re-apply as pest numbers indicate or every 7-10 days with a maximum of 5 applications to the crop. If mites are also a problem DO NOT use more than two NAADCO Abamectin 18 EC Insecticide / Miticide sprays per crop. Refer to notes on Resistance under General Instructions section of this label. NB: Other IPM strategies to reduce leafminer populations should be employed.
Strawberries	Two Spotted Mite	100mL/100 L If spray volume	3 days (harvest)	Spray to wet foliage to near the point of run-off. Thorough coverage and penetration into plants is essential. Preferably apply on first appearance of

	(<i>Tetranychus urticae</i>)	is less than 600L/ha, use a minimum of 600mL NAADCO Abamectin 18 EC Insecticide / Miticide per ha. Do not exceed 1.2L/ha NAADCO Abamectin 18 EC Insecticide / Miticide per application.	3 days (livestock/ grazing)	mites. When applied early, one application may be sufficient to give effective control however, if mite numbers exceed 3 - 5 mites per leaflet, apply two applications spaced 7-10 days apart. Re-apply as pest numbers indicate to a maximum of two sprays of NAADCO Abamectin 18 EC Insecticide / Miticide per season. If retreatment is required after 2 consecutive sprays with NAADCO Abamectin 18 EC Insecticide / Miticide, use an approved miticide from a different chemical group. Refer to notes on Resistance under General Instruction section of this leaflet. Integrated Pest Control: see comments in the Apple and Pear Section.
Ornamentals including Roses, Chrysanthemums Carnations and indoor foliage plants	Two Spotted Mite (<i>Tetranychus urticae</i>)	50mL/100L to a maximum of 1.5L NAADCO Abamectin 18 EC Insecticide / Miticide per application.	DO NOT cut or graze for stock food	Spray to wet foliage to near the point of runoff using at least 2,000 litres per hectare (100 litres per 500 square metres). Thorough coverage and penetration into plants is essential. Preferably apply on first appearance of mites. If applied when pest numbers are low to moderate, one application will be sufficient to give effective control. However, if mites are numerous, apply two applications spaced 7-10 days apart. Re-apply as pest numbers indicate to a maximum of two sprays with NAADCO Abamectin 18 EC Insecticide / Miticide per season. Ferns and Shasta Daisies may be affected by NAADCO Abamectin 18 EC Insecticide / Miticide, so the product should not be used on them. For ornamentals not listed on the leaflet, small test applications to assess for unexpected phytotoxicity should be made before spraying the whole crop. DO NOT use more than two times per season. Refer to notes on Resistance under General Instructions section of this leaflet.

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

GENERAL INSTRUCTIONS

NAADCO Abamectin 18 EC Insecticide / Miticide is for control of pest mites on pears, apples, tomatoes, citrus, hops, strawberries and ornamentals, and for the control of pest mites and native budworm on cotton. After application, NAADCO Abamectin 18 EC Insecticide / Miticide quickly moves onto leaves where it remains for several weeks and where it is taken up by sucking mites. NAADCO Abamectin 18 EC Insecticide / Miticide is not systemic, making good coverage essential. Abamectin that is not absorbed into plants is quickly degraded.

APPLICATION ON COTTON

Air: Apply by air spray when there is a reliable cross wind to assist with good penetration into crop canopy. Application should be carried out in the cooler parts of the day or night. Preferably use aircraft fitted with micronair atomisers.

Ground: Use inter-row droppers fitted with nozzles spraying towards the cotton rows. Inter-row nozzles should be level with or just below the canopy and spraying at right angles to the ground.

MIXING

Measure the required amount of NAADCO Abamectin 18 EC Insecticide / Miticide, add to the partly filled spray tank, and then add the remainder of the water. If oil is recommended, add this after the NAADCO Abamectin 18 EC Insecticide / Miticide is well mixed. Wetting agent is not required.

MIXING INSTRUCTIONS FOR APPLES AND PEAR APPLICATIONS

To achieve 750mL NAADCO Abamectin 18 EC Insecticide / Miticide plus 5L Summer Oil per ha, apply spray at the following mixing rates.

WATER	NAADCO Abamectin 18 EC Insecticide / Miticide (Amount required per 100Litres)	Summer Oil
1000L/ha (minimum)	75mL	500mL
1500L/ha (minimum)	50mL	335mL
2000L/ha (minimum)	37.5mL	250mL
2500L/ha (minimum)	30mL	200mL

CROP SAFETY

NAADCO Abamectin 18 EC Insecticide / Miticide plus Summer Oil may very occasionally cause slight russetting on some pear varieties, particularly ANJOU and other sensitive varieties when used alone or when other products are supplied sequentially. A very small amount of temporary apple fruit

blemishing may be associated with low water volume applications. NAADCO Abamectin 18 EC Insecticide / Miticide plus Summer Oil may cause more severe fruit russetting on sensitive apple varieties such as Golden Delicious when used within 7 days before or after application of the fungicide DELAN SC*. The Directions for Use and Precautions on summer oil labels should be followed carefully. Certain conditions may play a part in the occurrence of this damage. DO NOT make applications (1) when unusually hot conditions are present or expected within 24 hours after application, (2) under poor or slow drying conditions or (3) with equipment that may leave large droplets on fruit after application.

COMPATIBILITY:

NAADCO Abamectin 18 EC Insecticide/Miticide is compatible with most commonly used insecticides and fungicides. DO NOT apply with ULV formulations.

CROP MONITORING

Effective mite control depends upon regular monitoring of crops. Check crops regularly (every 3-5 days) during the season.