



POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

ALBAUGH ACARAMIK INSECTICIDE/MITICIDE EC

ACTIVE CONSTITUENT: 18 g/L ABAMECTIN
266 g/L N-METHYLPYRROLIDONE
60 g/L HYDROCARBON LIQUID

GROUP

6

INSECTICIDE

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.
IMPORTANT: READ THE ATTACHED LEAFLET/BOOKLET BEFORE USE

ALBAUGH AUSTRALIA PTY LTD
Level 1, 530 Little Collins Street,
Melbourne VIC 3000
Australia
Tel 03 9909 7183
www.albaugh.com/au

 **INSECTICIDE/
MITICIDE**



Directions for Use
Restraints
DO NOT use if rainfall is expected before spray has dried as reduced efficacy may result.
DO NOT overhead irrigate 24 hours after application.

SITUATION	PEST	RATE	WITHHOLDING PERIOD	CRITICAL COMMENTS
Cotton	Two spotted mite (<i>Tetranychus urticae</i>), Carmine mite (<i>Tetranychus cinnabarinus</i>)	300 mL/ha	20 days (harvest) 20 days (livestock/ grazing)	Do not make more than two applications to cotton per season, regardless of pest controlled. Apply by ground spraying equipment or fixed wing aircraft in a minimum volume of 20 litres per hectare. 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. Application 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 label.
	Native budworm (<i>Helicoverpa punctigera</i>)	300 mL/ha OR 600 mL/ha		Use only when Lepton test kits 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 sized larval populations should be avoided. Do not use more than twice in one season for native budworm control.

SITUATION	PEST	RATE	WITHHOLDING PERIOD	CRITICAL COMMENTS
Pears Apples	Two spotted mite (<i>Tetranychus urticae</i>), European red mite (<i>Panonychus ulmi</i>)	750 mL/ha plus 5 L/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 1,000 L/ 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 ALBAUGH ACARAMIK® takes about 7 days to reach maximum mite control. ALBAUGH ACARAMIK® will control moderate to high mite population 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 label. Integrated pest control: the effects of ALBAUGH ACARAMIK® on parasitic wasps and other beneficial insects in Australian orchards are not fully known. Studies have shown that after application of ALBAUGH ACARAMIK®, predatory mite populations may not increase in pest mite numbers, allowing the continuation of biological mite control. Do not use in IPM programmes unless the pest mite threshold has been reached and predators are unlikely to achieve effective control.
Citrus	Brown citrus rust mite (<i>Tegolophus australis</i>), Citrus rust mite (<i>Phyllocoptera oleivora</i>), Broad mite (<i>Polyhagotarsonemus latus</i>)	12 mL-25 mL/100 L plus 250 mL/100 L Summer Oil	7 days (harvest)	Apply as pest pressure indicates, as a dilute spray in 3,000 L to 6,000 L of water per hectare. 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>)	1.0 L/ha	28 days (harvest/ grazing/cut for stockfood)	Apply as pest pressure indicates, as a dilute spray in 1,000 L to 2,000 L of water per hectare, 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 mL – 450 mL/ha ALBAUGH ACARAMIK® using concentrations of 60-90 mL/ha	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 ALBAUGH ACARAMIK® and do not use more than 2 ALBAUGH ACARAMIK® sprays per crop. Refer to notes on resistance under General Instructions section of this label.
	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>)	High volume spraying: 600 mL/ha using concentrations of 120 mL/100 L		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 2 ALBAUGH ACARAMIK® 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 mL – 450 mL/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 ALBAUGH ACARAMIK® and do not use more than 2 ALBAUGH ACARAMIK® sprays per crop. Refer to notes on resistance under General Instructions section of this label.
	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>)	600 mL/ha		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. 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 2 ALBAUGH ACARAMIK® 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.

SITUATION	PEST	RATE	WITHHOLDING PERIOD	CRITICAL COMMENTS
Strawberries	Two spotted mite (<i>Tetranychus urticae</i>)	100 mL/100 L. If spray volume is less than 600 L/ha, use a minimum of 600 mL/ ha ALBAUGH ACARAMIK®. Do not exceed 1200 mL/ ha ALBAUGH ACARAMIK® per application.	3 days (harvest) 3 days (livestock/ grazing)	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 mites. When applied early, one application may be sufficient to give effective control. However, if mite numbers exceed 5-6 mites per leaf, apply to applications spaced 7-10 days apart. Re-apply as pest numbers indicate to a maximum of 2 ALBAUGH ACARAMIK® sprays per season. If re-treatment is required after 2 consecutive sprays with ALBAUGH ACARAMIK®, use an approved miticide from a different chemical group. Refer to notes on resistance under General Instructions section of this label. 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>)	50 mL/100 L to a maximum of 1.5 L/ ha ALBAUGH ACARAMIK per application.	DO NOT cut or graze for stock food	Spray to wet foliage to near the point of run-off using at least 2,000 L/ha (100 L per 500 square metres). Thorough coverage and penetration into plants is essential. Preferably apply on first appearance of mites. When 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 2 sprays with ALBAUGH ACARAMIK® sprays per season. Ferns and Shasta Daisies may be affected by ALBAUGH ACARAMIK®, so the product should not be used on them. For ornamentals not listed on the label, 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 label.

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

WITHHOLDING PERIODS

- COTTON:
- APPLES, PEARS:
- CITRUS:
- HOPS:
- STRAWBERRIES, TOMATOES:
- ORNAMENTALS:
- DO NOT harvest for 20 days after application. DO NOT graze or cut for stock feed for 20 days after application.
- DO NOT harvest for 14 days after application. DO NOT feed treated produce to livestock for 14 days after application.
- DO NOT harvest for 7 days after application.
- DO NOT harvest, graze or cut for stock food for 4 weeks after application.
- DO NOT harvest for 3 days after application. DO NOT feed treated produce to livestock for 3 days after application.
- DO NOT cut or graze for stock food.

GENERAL INSTRUCTIONS

ALBAUGH ACARAMIK® is for the 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. Refer to accompanying leaflet for complete directions for use and product constraints. After application, ALBAUGH ACARAMIK® quickly moves into leaves where it remains for several weeks and where it is taken up by sucking mites. ALBAUGH ACARAMIK® is not synthetic making good coverage essential. Abamectin that is not absorbed into plants is quickly degraded.

CROP MONITORING

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

APPLICATION ON COTTON

Air: Apply by spray when there is a reliable cross wind to assist with good penetration into the 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. Interrow nozzles should be level with or just below the canopy and spraying at right angles to the ground.

MIXING

Measure the required amount of ALBAUGH ACARAMIK®, add to the partly filled spray tank, and then add the remainder of the water. If oil is recommended, add this after the ALBAUGH ACARAMIK® is well mixed. Wetting agent is not required.

MIXING INSTRUCTIONS FOR APPLE AND PEAR APPLICATIONS

To achieve 750 mL ALBAUGH ACARAMIK® plus 5 L summer oil per ha, apply spray at the following mixing rates:

WATER	ALBAUGH ACARAMIK® (Amount required per 100 L)	SUMMER OIL (Amount required per 100 L)
1,000 L/ha (minimum)	75 mL	500 mL
1,500 L/ha	50 mL	335 mL
2,000 L/ha	37.5 mL	250 mL
2,500 L/ha	30 mL	200 mL

CROP SAFETY

ALBAUGH ACARAMIK® 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 applied sequentially. A very small amount of temporary apple fruit blemishing may be associated with low water volume applications. ALBAUGH ACARAMIK® 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.

INSECTICIDE RESISTANCE WARNING

GROUP	6	INSECTICIDE
-------	---	-------------

For insecticide resistance management ALBAUGH ACARAMIK® is a Group 6 insecticide. Some naturally occurring insect biotypes resistant to ALBAUGH ACARAMIK® 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 ALBAUGH ACARAMIK® or other Group 6 insecticides are used repeatedly. The effectiveness of ALBAUGH ACARAMIK® on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, ALBAUGH AUSTRALIA PTY LTD accepts no liability for any losses that may result from the failure of ALBAUGH ACARAMIK® to control resistant insects. ALBAUGH ACARAMIK® may be subject to specific resistant management strategies.

RESISTANCE

Experience has shown that repeated use of one particular miticide or miticides from the same chemical group can lead to the early development of mite resistance to that miticide or chemical group. Therefore, ALBAUGH ACARAMIK® 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.

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

Alternate ALBAUGH ACARAMIK® with approved miticides from other chemical groups. For further information contact your local supplier, ALBAUGH AUSTRALIA PTY LTD representative or local agricultural department agronomist.

PRECAUTIONS

Re-entry Period: Under field conditions the spray should be allowed to dry on the foliage before re-entry into the treated areas. Do not allow entry into treated areas in 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 PVC gloves.

PROTECTION OF WILDLIFE, FISH CRUSTACEANS AND ENVIRONMENT

Do not apply when weather conditions favour drift from the target area. Dangerous to fish and other aquatic organisms. Do not contaminate streams, rivers or waterways with the chemical or used container. Dangerous to bees. Do not spray 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. Empty containers and any residual concentrate or diluted spray mix should be disposed of safely in an approved landfill.

STORAGE AND DISPOSAL

Store in closed, original container in a cool, well-ventilated area. Do not store for prolonged periods in direct sunlight.

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.

SAFETY DIRECTIONS

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 PVC gloves and goggles. For space applications wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves and 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 days use wash gloves, goggles, contaminated clothing and respirator (if rubber wash with detergent and warm water).

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre, Phone Australia 131126. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

SAFETY DATA SHEET

Additional information is listed in the safety data sheet (SDS) which is available from the supplier and accessible from the Albaugh website albaugh.com/au

TERMS AND CONDITIONS OF SUPPLY, SALE AND USE

Many factors can affect or influence the activity of this product, including, but not limited to: weather and soil conditions, crop variety, treatment timing, water volume, application rates, spraying techniques, crop rotation, regional factors, and the occurrence and development of strains resistant to the active ingredient. Under certain circumstances, changes in activity or crop damage can occur. The manufacturer or supplier is unable to accept liability in these circumstances. All goods supplied by us are of a high grade and we believe them to be suitable for the purpose for which we expressly supply them: but we cannot exercise any control over their mixing, use or application which may affect the performance of the goods. All conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application, or use. These conditions cannot be varied by our staff, agents, or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

APVMA Approval Number: 56346/141424