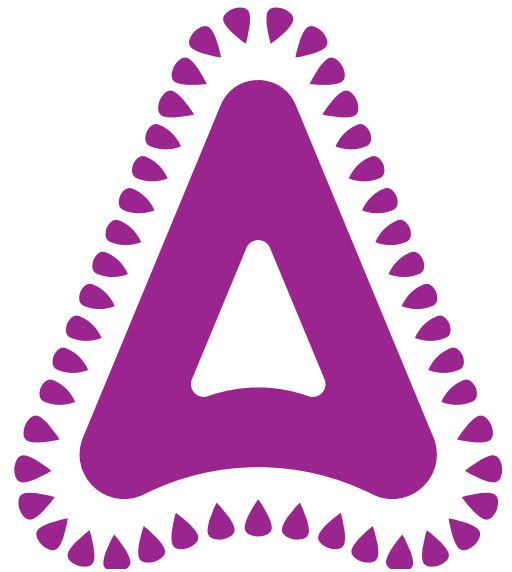


CAUTION

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

Kohinor[®] 200 Insecticide



ADAMA

ESSENTIALS

ACTIVE CONSTITUENT: 200 g/L IMIDACLOPRID

GROUP 4A INSECTICIDE

For the control of various insect pests of cotton, fruit, vegetables, ornamentals and turf as specified in the Directions for Use table.

adama.com

CONTENTS: 1L, 5L, 10L, 20L, 60 L, 110L

**DIRECTIONS FOR USE
FOLIAR SPRAY APPLICATIONS**

CROP	PEST	RATE	WHP	CRITICAL COMMENTS
Cotton	Aphids	250 mL/ha + Pulse [®] Penetrant at 0.2% v/v (2 mL/L water) or equivalent organosilicone surfactant* (eg Freeway Gold [®]) * Check with Adama for recommended organosilicone surfactants	13 weeks	The addition of Pulse Penetrant or equivalent is critical for the performance of KOHINOR 200. Apply early in the establishment of an aphid infestation when numbers are low (ie no more than 1 or 2 leaves per plant with honeydew present). Applications made later than this may result in reduced control. Shorter residual control may be evident and a repeat application of a registered aphicide (follow the Cotton Insecticide Resistance Management Strategy for cotton aphid) may be required to achieve complete control: <ul style="list-style-type: none"> • if application of KOHINOR 200 plus Pulse or equivalent are timed too late (see above); or • if existing high density aphid colonies (hotspots) are present; or • if aphids have established throughout the plant canopy (especially lower in the canopy); or • if there is high reinfestation pressure; or • if there is rapid crop growth; or • if KOHINOR 200 plus Pulse or equivalent is used following a spray-failure (eg resistance to organophosphate or carbamate insecticides). Note: Where resistance to carbamates or organophosphates is suspected, KOHINOR 200 plus Pulse or equivalent should be used first so as not to delay control of the aphids present. Aphids treated with KOHINOR 200 plus Pulse or equivalent may still be present on the plant but will not be feeding. Control of aphids should initially be assessed by a reduction in fresh honeydew and not on the presence of aphids on the plant. After ingesting KOHINOR 200, aphids may take up to 5 days to die.
	Mirids, Brown Flea Beetle			Apply when pest numbers reach treatment threshold levels as determined by field checks.
Stone Fruit	Green Peach Aphid, Black Peach Aphid	Dilute spraying 25 mL/100 L Concentrate spraying Refer to Mixing/ Application section	21 days	Apply at first sign of aphid infestation. Apply as a full cover spray, ensuring thorough coverage. Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods. DO NOT use in equipment that requires rates greater than 125 mL/100 L of water (ie. greater than 5x concentration).

FOLIAR SPRAY APPLICATIONS - continued

CROP	PEST	RATE	WHP	CRITICAL COMMENTS		
Cucurbits	Green Peach Aphid	25 mL/100 L or 300 mL/ha	1 day	Apply at first sign of aphid infestation.		
Capsicum, Egg plant, Potato			7 days			
Tomato			3 days			
Brassicac	Grey Cabbage Aphid, Turnip Aphid		7 days	Apply at first sign of aphid infestation. Add a wetting agent.		
Sweet potato	Silverleaf	25 mL/100 L or 250 mL/ha	7 days	Apply at first sign of Whitefly or Melon Thrips infestation. Apply dilute sprays (25 mL/200 L) to run-off. Ensure thorough coverage of underside of leaves. Use of droppers will improve coverage of underside of leaves.		
Cucumber	Whitefly, including type B		1 day			
Egg plant	Melon Thrips		7 days			
Roses	Aphids	25 mL/100 L	-	Apply as a thorough cover spray at first sign of insect infestation.		
Ornamentals	Aphids, Azalea Lace Bug, Bronze Orange Bug, Harlequin Bug, Citrus Mealybug, Greenhouse Thrips, Fullers Rose Weevil					
	Hibiscus Flower Beetle				50 mL/100 L	Spray buds and flowers as needed.
	Longtailed Mealybug				50 mL/100 L + surfactant	Apply 3 sprays 2 weeks apart. Use a non-ionic surfactant at label rate.
	Psyllids				25 mL/100 L	Spray at first sign and then a week later.
	Soft Scales		Spray in late Spring or when small scales are first seen. Apply 3 sprays 2 weeks apart. Add a wetting agent.			
Turf	First instar larvae of: African Black Beetle, Argentinian Scarab, Pruinose Scarab	2.5 L/ha or 25 mL/100 m ² Spray with at least 400 L water per hectare to ensure even coverage. Preferably spray on to wet or dewy grass. Irrigate with 12 mm of water commencing within one hour of application.		Apply at peak egg hatch, that is mid Spring to mid Summer depending on species.		
	Larvae of Billbug			Monitor adult activity through late Spring and early Summer. Spray when numbers peak, or when small larvae (4 mm) are found in the thatch or surface soil. Early application is essential to minimise grass damage due to feeding.		
Duboisia	Green Peach Aphid	25 mL/100 L		Apply when aphid numbers reach spray threshold levels as determined by regular monitoring. Ensure thorough coverage of all leaves.		
Pandanus Trees	Flatid (<i>Jamella australiae</i>)	Spot spray 875 mL/100 L of water Stem injection 1.75 L/1 L of water		Spot spray: Spray 100 mL of mixture directly into the leafy throat of each head. Stem injection: Drill holes 0.5 to 1 cm in diameter and 10 cm deep at an angle of 30° to 1.5 m above ground level. Drill one hole per limb (or trunk in single trunked trees). Apply 5 mL of mixture in each hole and seal the hole. DO NOT reapply in the same holes. Uptake of KOHINOR 200 and therefore control of the pest in heavily infested heads already showing severe damage, will be slow and may be incomplete.		

SOIL DRENCH APPLICATIONS

CROP	PEST	RATE	CRITICAL COMMENTS
Apples	Woolly Aphid	Chemical control 12 mL/1 L of water/ tree Beneficial insect plus chemical control (eg. <i>Apheilus mali</i> plus KOHINOR 200) 3 mL/1 L of water/tree	For trees up to 7 years of age. During late Summer or Autumn, apple trees with Woolly Aphid colonies or damage should be identified and marked for treatment the following season. At green tip to petal fall, apply 1 litre of the prepared KOHINOR 200 mixture to moist soil immediately around the base of the tree trunk. Ensure the mixture infiltrates the soil around the trunk and does not run-off the soil. Control weeds before application. DO NOT disturb or remove the soil around the trunk during the season. If aerial colonies are present at application, maximum effectiveness may not be achieved until the following season. DO NOT treat more than once in any 3 year period.
Elm	Elm Leaf Beetle	7 mL/25 mm of tree diameter at breast height	Mix the required dose in sufficient water to adequately treat each tree. Use at least 50 L of mix per tree up to a tree diameter of 400-500 mm and then 100 L per tree for larger trees. Inject mix to a depth of 20-30 cm in a minimum of 4 injection sites per tree, 0.75 to 1.5 m apart, arranged in an evenly spaced grid to just beyond the drip line. Ensure root zone is adequately moist with active root growth. Keep treated area moist for 7-10 days after treatment. Treat at least 6-10 weeks prior to pest attack in late Winter or early Spring when roots are active. DO NOT treat if soil is waterlogged.
Seedling Eucalypts (to 1 m high) in pots	Chrysomelid Beetle Larvae, Psyllids	2.5 mL/plant	Mix in water up to 0.5 L per 3 L pot and apply to soil. Use less water for smaller pots. DO NOT dilute to the point where mix runs out the bottom of pots

SOIL DRENCH APPLICATIONS - continued

CROP	PEST	RATE	CRITICAL COMMENTS
Azaleas in pots	Azalea Lace Bug	3.5 mL/250 mL water/pot	Use as a soil drench for pots up to 20 L capacity. Prior to application remove mulch and dead vegetation and moisten the soil surface. Apply the KOHINOR 200 mixture, and then water it in well immediately after application.
Ornamentals in pots	Scarab Beetle Larvae	3.5 mL/5 L water	Use as a soil drench. 5 L of mixture will treat twenty 6 L pots. Prior to application remove mulch and dead vegetation and moisten the soil surface. Apply the KOHINOR 200 mixture, and then water it in well immediately after application.
Roses	Aphids	3.5 mL/2 L water/plant	Use as a soil drench by pouring mixture evenly around drip zone. Use this rate for plants up to 1 m high. For each additional metre of plant height, add 2 mL extra of KOHINOR 200 to the 2 L of water. Prior to application remove mulch and dead vegetation and moisten the soil surface. Apply the KOHINOR 200 mixture, and then water it in well immediately after application.
For soil drench treatments, remove mulch and dead vegetation, and moisten the soil surface first. Apply the KOHINOR 200 mixture, then water it in well immediately after application.			

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

WITHOLDING PERIODS:

APPLES: NOT REQUIRED WHEN USED AS DIRECTED.
COTTON: DO NOT HARVEST FOR 13 WEEKS AFTER APPLICATION.
 DO NOT GRAZE OR CUT FOR STOCK FOOD.
CUCURBITS: DO NOT HARVEST FOR 1 DAY AFTER APPLICATION.
TOMATOES: DO NOT HARVEST FOR 3 DAYS AFTER APPLICATION.
BRASSICAS, CAPSICUM, EGG PLANT, POTATOES, SWEET POTATOES: DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.
STONE FRUIT: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

**DO NOT GRAZE ANY TREATED AREA OR CUT FOR STOCK FOOD.
 DO NOT FEED PRODUCE HARVESTED FROM TREATED AREA TO ANIMALS, INCLUDING POULTRY.**

GENERAL INSTRUCTIONS

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management KOHINOR® 200 **GROUP A4 INSECTICIDE** Insecticide is a Group 4A insecticide. Some naturally occurring insect biotypes resistant to KOHINOR 200 and other Group 4A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if KOHINOR 200 and other Group 4A insecticides are used repeatedly. The effectiveness of KOHINOR 200 on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Adama Australia Pty. Ltd. accepts no liability for any losses that may result from the failure of KOHINOR 200 to control resistant insects. KOHINOR 200 may be subject to specific resistance management strategies. For further information contact your local supplier, Adama representative or local agricultural department agronomist.

Insecticide Resistance Management Strategy

Cotton Aphid in cotton: Observe the cotton industry Insecticide Resistance Management Strategy (IRMS).

Aphids, Whitefly and Melon Thrips in various crops: DO NOT apply KOHINOR 200 (or other Group 4A Insecticides) in consecutive sprays within and between seasons. Rotate with registered insecticides from other mode of action groups.

Certified environments such as glasshouses:

Annuals – DO NOT apply more than one spray of KOHINOR 200 (or other Group 4A Insecticides) to any one crop.

Perennials – Rotate with registered insecticides from other groups. Use a maximum of three KOHINOR 200 (or other Group 4A Insecticides) sprays in any 12 months period.

MIXING/APPLICATION

Prior to pouring, shake container vigorously, then add the required quantity of KOHINOR 200 to water in the spray vat while stirring or with agitators in motion.

Dilute Spraying (Stone Fruit)

Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off. The required water volume may be determined by applying different test volumes, using different settings on the sprayer, from industry guidelines or expert advice. Add the amount of product specified in the Directions For Use table for each 100 L of water. Spray to the point of run-off. The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate Spraying (Stone Fruit)

Use a sprayer designed and set up for the concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed. Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.

Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate. The mixing rate for concentrate can then be calculated in the following way:

EXAMPLE ONLY

1. Dilute spray volume as determined above: For example 1500 L/ha.
2. Your chosen concentrate spray volume: For example 500 L/ha.
3. The concentration factor in this example is:
 $3 \times (\text{ie } 1500 \text{ L} \div 500 \text{ L} = 3).$
4. If the dilute label rate is 10 mL/100 L, then the concentrate rate becomes 3×10 , that is 30 mL/100 L of concentrate spraying.

The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.

DO NOT use a concentrate rate higher than that specified in the Critical Comments.

For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

APPLICATION (Cotton)

Thorough coverage of cotton plants is essential to achieve maximum performance from KOHINOR 200 plus Pulse®. Equipment should be calibrated to achieve a **minimum of 60 droplets/cm² on the target foliage**. A droplet **Volume Median Diameter (VMD)** for optimum performance from KOHINOR 200 plus Pulse is dependent on equipment and is defined below. DO NOT apply when unfavourable environmental conditions may reduce the quality of spray coverage.

GROUND APPLICATION (Cotton)

Application using ground equipment should be made using **hollow cone nozzles** with a **minimum spray volume of 100 L/ha**. Hollow cone nozzles are recommended but if flat fan nozzles are used, higher water volumes will be required and nozzles should be configured to ensure thorough coverage. A droplet **VMD of 150-180 microns** must be used. Where multiple nozzles per row are used, they should be of the same specification to ensure that each nozzle contributes an equal proportion of the required dose. Where multiple nozzles per row are used (particularly for banded applications) ensure the correct nozzles overlap pattern is achieved on the target foliage. **Banded applications less than 100% are not recommended beyond the 15 node crop stage.**

AERIAL APPLICATION (Cotton)

Apply in a **minimum spray volume of 25 L/ha**. A droplet **VMD 120-150 microns** must be used. DO NOT exaggerate swath width or exceed a swath width of 20 to 22 m. DO NOT apply KOHINOR 200 plus Pulse using Ultra Low Volume (ULV) methods. The use of large droplet placement equipment is not recommended.

EXPORT OF TREATED PRODUCE

Growers should note that suitable MRLs or import tolerances do not exist in all markets for edible produce treated with KOHINOR 200. If you are growing produce for export, please check with Adama for the latest information on MRLs and export tolerances before using KOHINOR 200.

NOTE ON ORNAMENTALS

KOHINOR 200 Insecticide has been used on a wide range of ornamental plant species without damage. However, some species and varieties are particularly sensitive to chemical sprays as this is often related to local conditions it is advisable to treat only a small number of plants first, in order to ascertain their reaction before treating the whole crop.

COMPATIBILITY

KOHINOR 200 is compatible with Antracol[†], Baycor[†], Nitofol[†]. DO NOT mix concentrates together but add each to the spray tank separately. As formulations of other manufacturers' products are beyond the control Adama Australia Pty. Ltd. all mixtures should be tested prior to mixing commercial quantities. As changes in climatic conditions can alter the sensitivity of plants to mixtures of spray, Adama cannot be responsible for the behaviour of such mixtures.

PROTECTION OF LIVESTOCK

Dangerous to bees. DO NOT spray any plants in flower while bees are foraging.

DO NOT graze any treated areas, or cut for stock food.

DO NOT feed produce harvested from treated area to animals, including poultry.

DO NOT graze treated turf or feed turf clippings from any treated area to poultry or livestock.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. A spraydrift minimisation strategy should be employed at all times when aeri ally applying sprays. The strategy envisaged is exemplified by the cotton industry's Best Management Practices Manual.

STORAGE AND DISPOSAL (1 L)

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on-site.

Dispose of at a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

STORAGE AND DISPOSAL (5 L, 10 L, 20 L)

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Triple or preferably pressure 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 bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Envirodrum Micro Matic Valve (60, 110 L)

Store the original sealed Envirodrum in a cool well-ventilated area. DO NOT store for prolonged periods in direct sunlight. DO NOT tamper with the Micro Matic valve or the security seal. DO NOT contaminate the Envirodrum with water or any foreign matter. After each use of the product, please ensure that the Micro Matic coupler delivery system and hoses are disconnected, triple rinsed with clean water and drained accordingly. When the contents of the Envirodrum have been used, please return the Envirodrum to the point of purchase. The Envirodrum remains the property of Adama Australia Pty. Ltd.

SAFETY DIRECTIONS

Harmful if swallowed. May irritate the eyes and skin. Avoid contact with eyes and skin. Wash hands after use. When preparing product for use, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length PVC gloves and goggles. After each day's use, wash gloves, goggles and contaminated clothing.

FIRST AID

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

MSDS

Additional information is listed in the material safety data sheet (MSDS). A material safety data sheet for KOHINOR 200 is available from Adama on request. Call Customer Service on (02) 9431 7800.

CONDITIONS OF SALE: The use of KOHINOR[®] 200 Insecticide being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia Pty. Ltd. regarding its suitability, fitness or efficiency for any purpose for which it is used by the buyer, whether in accordance with the directions or not and Adama Australia Pty. Ltd. accepts no responsibility for any consequence whatsoever resulting from the use of this product.

[®] Kohinor is a trademark of an ADAMA Agricultural Solutions Ltd Company
^{*} Other trademarks

NOT A DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN DANGEROUS GOODS (ADG) CODE.

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Batch No.

Date of Manufacture