

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

QUANTUM

Indoxacarb 300 WG

INSECTICIDE

ACTIVE CONSTITUENT: 312.5 g/kg INDOXACARB (96:4)
sufficient to provide 300g/kg ACTIVE (S)-ISOMER

GROUP 22A INSECTICIDE

For the control of insect pests in Azuki beans, Chickpeas, Cotton, Faba beans, Mungbeans, Soybeans and in certain vegetable and fruit crops as per the Directions for Use table.

APVMA Approval No.: 96770/150632

WG

Formulation Type
**Water Dispersible
Granule**

**BE PROUDLY
AUSTRALIAN**

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DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply if rainfall is expected within 2 hours of application or if heavy dew is present on crops.

DO NOT use on container, hydroponic, greenhouse or glasshouse grown crops.

DO NOT apply within 20 m upwind of water bodies.

DO NOT apply by aircraft (tomatoes, cotton, chickpeas, faba beans, azuki beans, mungbeans, soybeans excepted).

COTTON

DO NOT apply more than three (3) applications per field in any one cotton growing season and no more than two (2) consecutive sprays per field per season. Applications must be a minimum of seven days apart.

AZUKI BEANS, CHICKPEAS, FABA BEANS, MUNGBEANS, SOYBEANS

DO NOT apply more than one (1) application per field for the crops entire growth cycle.

SPRAY DRIFT RESTRAINTS

Specific definitions for terms used in this section of the label can be found at www.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. The buffer zones in the relevant buffer zone table/s below provide guidance but may not be sufficient in all situations. 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 one to two hours before sunset and persist until one to two hours after sunrise.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a COARSE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory downwind buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

DO NOT apply by a boom sprayer unless the following requirements are met:

- Spray droplets not smaller than a FINE spray droplet size category.
- Minimum distances between the application site and downwind sensitive areas (see 'Mandatory downwind buffer zones' section of the following table titled 'Buffer zones for boom sprayers') are observed.

Buffer Zone for Boom Sprayers			
	Mandatory downwind buffer zones (metres)		
	Natural aquatic areas	Vegetation areas	Livestock areas
All crops except cotton, chickpeas, faba beans, azuki beans, mungbeans, soybeans	0 m	0 m	80 m
Cotton, chickpeas, faba beans, azuki beans, mungbeans, soybeans	0 m	0 m	20 m

DO NOT apply by aircraft unless the following requirements are met:

- Spray droplets not smaller than a MEDIUM spray droplet size category.
- For maximum release height above the target canopy of 3 m or 25 per cent of wingspan or 25 per cent of rotor diameter, whichever is the greatest, minimum distances between the application site and downwind sensitive areas (see 'Mandatory buffer zones' section) are observed.

Buffer zones for aircraft				
	Mandatory downwind buffer zones (metres)			
	Type of aircraft	Natural aquatic areas	Vegetation areas	Livestock areas
All crops except cotton, chickpeas, faba beans, azuki beans, mungbeans, soybeans	Fixed-wing and Helicopter	0 m	0 m	300 m
Cotton, chickpeas, faba beans, azuki beans, mungbeans, soybeans	Fixed-wing and Helicopter	0 m	0 m	50 m

ENSURE YOU READ THE PROTECTION STATEMENTS BEFORE APPLYING THE PRODUCT.		
CROP	PEST	STATE
Broccoli Brussels sprouts Cabbage (closed head varieties only) Cauliflower	Cabbage white butterfly (<i>Pieris rapae</i>) Cotton Bollworm (<i>Helicoverpa armigera</i>) Native budworm (<i>Helicoverpa punctigera</i>)	All States
	Cluster caterpillar (<i>Spodoptera litura</i>) Cabbage center grub (<i>Hellula hydralis</i>) Diamondback moth (<i>Plutella xylostella</i>)	
Leafy vegetables: Chicory, Cress, Endive, Fennel, Kale, Lettuce: closed head and leafy varieties; Mustard, Silverbeet, Spinach and Chinese leafy vegetables: Bok Choy, Choy sum, Chinese cabbage	Cotton bollworm (<i>Helicoverpa armigera</i>) Native budworm (<i>Helicoverpa punctigera</i>)	All States
	Capsicum Eggplant Peppers Tomato (trellis and field)	
Apples Nashi pear Pears	Cotton Bollworm (<i>Helicoverpa armigera</i>) Native Budworm (<i>Helicoverpa punctigera</i>)	All States
	Potato moth (Tomato leaf miner) (<i>Phthorimaea operculella</i>)	
Apples Nashi pear Pears	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. Refer to Application section of the label.	All States
	Coding moth (<i>Cydia pomonella</i>) Budworms (<i>Helicoverpa</i> spp.)	

RATE	CRITICAL COMMENTS.
170 g/ha	Use in accordance with AIRAC Insecticide Resistance Management Strategy guidelines. Apply as egg and larvae reach threshold numbers. Contact the local Department of Agriculture or consultant for further information on management of Diamondback Moth.
250 g/ha	Thorough coverage is essential. Adjust water volumes to crop stage (200-1000L/ha). Refer to Surfactant/Wetting agent section. For Cabbage Centre grub time sprays early to ensure larvae are exposed to treatment before they become entrenched in protected feeding sites. For best results, it is recommended that up to 3 applications of Quantum Indoxacarb 300 WG Insecticide to be made sequentially as thresholds dictate. A maximum of 4 applications can be made to any one crop. DO NOT retreat within seven (7) days. Further treatment should be made with alternative mode of action insecticides.
170 g/ha	FOR ALL CROPS Regularly scout crops to monitor for eggs and larvae. Target sprays against eggs and newly hatched larvae before they become entrenched. Use enough water to ensure thorough coverage of the crop. Adjust water volumes to crop stage (200-1000 L/ha) . Refer to Surfactant/Wetting agent section. Apply a maximum of 3 applications to any one crop. DO NOT retreat within seven (7) days. Further treatments should be made with alternative mode of action insecticides. As part of an Insecticide Resistance Management programme for cotton bollworm, it is important to plough crops immediately after harvest.
170 or 250 g/ha or 17 g/100L dilute	CAPSICUM, EGGPLANT, PEPPERS, TOMATO Use 250 g/ha during periods of heavy Heliopsis pressures or when using aerial application (Tomatoes only) .
170 g/ha or 17g/100L dilute	
Dilute spraying: 25g/100L water Concentrate spraying: Refer to Mixing/ Application section	Thorough fruit coverage is essential. A maximum of 6 applications of Quantum Indoxacarb 300 WG Insecticide are to be applied at 10 day intervals commencing at petal fall (or before 80 Degree Days after codling moth are detected in traps) until late December. Further treatments should be made with alternate mode of action insecticide. The above programme, when commenced at petal fall, will also control budworms.

CROP	PEST	STATE
Apples Nashi pear Pears — continued	Lightbrown apple moth (<i>Epiphyas postvittana</i>)	All States
	Weevils: Apple weevil (<i>Otiorhynchus cribricollis</i>) Fuller's Rose weevil (<i>Asynonychus cervinus</i>) Garden Weevil (<i>Phlyctinus callosus</i>)	
	Wingless grasshopper (<i>Phaulacridium vittatum</i>)	
Apricot Nectarine Peaches Plums	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. Refer to Application section of the label.	All States
	Budworms (<i>Helicoverpa</i> spp.)	

RATE	CRITICAL COMMENTS.
Dilute spraying: 12.5g/100L water Concentrate spraying: Refer to Mixing/ Application section	Thorough fruit coverage is essential. A maximum of 6 applications of Quantum Indoxacarb 300 WG Insecticide are to be applied at 14 day intervals commencing at petal fall or apply at 140 Degree. Days after Lightbrown apple moths are detected in traps. Best results are obtained when Quantum Indoxacarb 300 WG Insecticide treatments are applied consecutively. Further treatments should be made with alternative mode of action insecticides.
	Monitor weevil emergence. Garden weevil usually emerges late October to late November. Apple weevil and Fuller's Rose weevil usually emerge late November to late December. Garden weevil and Apple weevil: Prevent damage by treating early in the stage of emergence. Fuller's Rose weevil: Spray after peak weevil emergence when leaf damage is obvious. Thorough coverage is essential. Continue monitoring after spraying. For weevils there is a maximum of 2 applications per season. DO NOT retreat within ten (10) days. DO NOT use for more than 2 consecutive seasons.
	Dilute spraying: 25g/100L water Concentrate spraying: Refer to Mixing/ Application section Spray when local thresholds have been reached and damage is being observed. Thorough coverage is essential. DO NOT retreat within ten (10) days.
Dilute spraying: 25g/100 L water Concentrate spraying: Refer to Mixing/ Application section	Target sprays against eggs and newly hatched larvae before they become entrenched. A maximum of 3 applications of Quantum Indoxacarb 300 WG Insecticide is to be applied at 10 day intervals to each crop. Further treatments should be made with alternative mode of action insecticides (non-group 22A) . Thorough coverage is essential. Best results are obtained with Quantum Indoxacarb 300 WG Insecticide treatments are applied consecutively.

CROP	PEST	STATE
Apricot Nectarine Peaches Plums – continued	Oriental fruit moth (<i>Grapholita molesta</i>)	All States
	Lightbrown apple moth (<i>E. postvittana</i>)	
	Weevils: Apple weevil (<i>Otiorhynchus cribricollis</i>) Fuller's Rose weevil (<i>Asynonychus cervinus</i>) Garden weevil (<i>Phylactinus callosus</i>)	
	Wingless grasshopper (<i>Phaulacridium vittatum</i>)	

RATE	CRITICAL COMMENTS.
Dilute spraying: 25g/100 L water Concentrate spraying: Refer to Mixing/ Application section	Thorough coverage is essential. When treating the first generation, apply the initial treatment before 110 Degree Days after Oriental fruit moths are detected in traps. A maximum of 3 applications of Quantum Indoxacarb 300 WG Insecticide is to be applied at 10 day intervals to each crop. Target sprays against eggs and newly hatched larvae before they become entrenched. Best results are obtained when Quantum Indoxacarb 300 WG Insecticide treatments are applied consecutively. Further treatments should be made with alternative mode of action insecticides.
Dilute spraying: 12.5g/100L water Concentrate spraying: Refer to Mixing/ Application section	Thorough fruit coverage is essential. A maximum of 3 applications of Quantum Indoxacarb 300 WG Insecticide are to be applied at 14 day intervals commencing at 140 Degree Days after Lightbrown apple moths are detected in traps. Best results are obtained when Quantum Indoxacarb 300 WG Insecticide treatments are applied consecutively. Further treatments should be made with alternative mode of action insecticides. Monitor weevil emergence. Garden weevil usually emerges late October to late November. Apple weevil and Fuller's Rose weevil usually emerge late November to late December. Garden weevil and Apple weevil: Prevent damage by treating early in the stages of emergence. Fuller's Rose weevil: Spray after peak weevil emergence when leaf damage is obvious. Thorough coverage is essential. Continue monitoring after spraying. For weevils there is a maximum of 2 applications per season. DO NOT retreat within ten (10) days. DO NOT use for more than 2 consecutive seasons.
Dilute spraying: 25g/100L water Concentrate spraying: Refer to Mixing/ Application section	Spray when local thresholds have been reached and damage is being observed. Thorough coverage is essential. DO NOT retreat within ten (10) days.

CROP	PEST	STATE
Grapes	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. Refer to Application section of the label.	
	European Earwig (<i>Forficula uriculari</i>) (suppression only)	All States
	Garden weevil (<i>Phlyctinus collosus</i>)	
	Grapevine moth (<i>Phalaenoides glycinæ</i>)	
	Inland Katydid (<i>Caedicia simplex</i>)	
	Lightbrown apple moth (<i>E. Postvittana</i>)	
	Wingless grasshopper (<i>Phaulacridium vittatum</i>)	

RATE	CRITICAL COMMENTS.
Dilute spraying: 17g/100L water	Only apply treatments if damage is likely to occur. Thorough coverage is essential. Continue monitoring after spraying. DO NOT retreat within ten (10) days. DO NOT apply after pre-bunch closure (growth stage EL31) .
Concentrate spraying: Refer to Mixing/ Application section	Monitor weevil emergence. Delay application until damage in the canopy is observed. This is usually late October to Late November for garden weevil. Thorough coverage is essential. Continue monitoring after spraying. For garden weevil there is a maximum of 2 applications per season. DO NOT apply after pre-bunch closure (growth stage EL31) .
Dilute spraying: 8g/100L water	Spray when local thresholds have been reached. Thorough coverage is essential. DO NOT retreat within ten (10) days. DO NOT apply between pre-bunch closure (growth stage EL31) and harvest. Post harvest infestations can be treated.
Concentrate spraying: Refer to Mixing/ Application section	Spray when local thresholds have been reached. Thorough coverage is essential. DO NOT retreat within ten (10) days. DO NOT apply between pre-bunch closure (growth stage EL31) and harvest.
Dilute spraying: 17g/100L water	Applications to be timed for egg hatch (140 Degree Days after a detected moth flight).
Concentrate spraying: Refer to Mixing/ Application section	Thorough fruit coverage is essential. A maximum of 3 applications of Quantum Indoxacarb 300 WG Insecticide to be applied to each crop, with 2 applications at flowering and fruit set (depending on pest pressure as assessed by crop scouting). DO NOT retreat within ten (10)days. A final application may be applied up to bunch closure. DO NOT apply after bunch closure. Further treatments should be made with alternative mode of action insecticides.
	Spray when local thresholds have been reached and damage is being observed. Thorough coverage is essential. DO NOT retreat within ten (10) days. DO NOT apply between pre-bunch closure (growth stage EL31) and harvest. Concentrated spray: DO NOT apply in volumes less than 400l/ha. This low water volume is dependent on the suitability of concentrated spray application equipment. More reliable application may be gained through increased water volumes.

CROP	PEST	STATE
Cotton	Cotton bollworm (<i>Helicoverpa armigera</i>) Native budworm (<i>H. punctigera</i>)	NSW, NT, Qld and WA only
	Green mirid (<i>Creontiades dilutus</i>)	
Chickpeas Faba beans	Cotton bollworm (<i>H. armigera</i>) Native budworm (<i>H. punctigera</i>)	All States
Azuki beans Mungbeans Soybeans	Cotton bollworm (<i>H. armigera</i>) Native budworm (<i>H. punctigera</i>)	All States
	Soybean looper (<i>Thysanoplusia orichalcea</i>)	
	Red shouldered leaf or Monolepta beetle (<i>Monolepta australis</i>) Soybeans only	

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

RATE	CRITICAL COMMENTS.
325 g/ha or 425 g/ha	Use the lower rate of Quantum Indoxacarb 300 WG Insecticide when: (1) <i>H. armigera</i> specific field levels are less than or equal to 60 % prior to treatment application AND (2) egg and larvae pressure ARE AT 5 – 10 brown eggs and 2 very small (first instar) or small larvae (second instar) per 10 cotton terminals AND (3) where preservation of beneficial insects is desirable. Use the higher rate of Quantum Indoxacarb 300 WG Insecticide when: (1) <i>H. armigera</i> specific field levels are greater than 60 % prior to treatment application AND (2) egg and larvae pressure ARE AT 5 – 15 brown eggs and 2 very small (first instar) or small larvae (second instar) per 10 cotton terminals AND (3) where preservation of beneficial insects is desirable. Target nymphs and/or adults when they reach the economic spray threshold. Use 325 or 425 g/ha when controlling <i>Helicoverpa</i> spp. AND Green mirids. Refer Heliothis recommendations. Use the higher rate on infestations exceeding economic spray threshold levels and/or large canopy crops. Under high populations suppression only may be observed. Note: Quantum Indoxacarb 300 WG Insecticide has limited residual activity in controlling new infestations of Green mirids (either new hatchings of nymphs or influx of adults) post-spray.
150 g/ha	Target brown eggs and hatchling (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold and before they become entrenched in flowers (particularly relevant to Faba beans) or pods.
200 g/ha	Target brown eggs and hatchling (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold and before they become entrenched in flowers and pods.
100 g/ha	Target hatchling (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold.
100 g/ha	Target adult beetles when they reach the economic spray threshold. Ensure thorough spray coverage.

WITHHOLDING PERIODS

HARVEST

Cotton: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION.

Azuki beans, chickpeas, faba beans, mungbeans, soybeans: DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.

Capsicum, eggplant, leafy vegetables, peppers, tomatoes, (field and trellis): DO NOT APPLY LATER THAN 3 DAYS BEFORE HARVEST.

Broccoli, brussels sprouts, cabbage, cauliflower: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.

Apricot, nectarine, peach, plum: DO NOT APPLY LATER THAN 7 DAYS BEFORE HARVEST.

Apples, nashi pears, pears: DO NOT APPLY LATER THAN 14 DAYS BEFORE HARVEST.

Grapes: DO NOT APPLY LATER THAN 8 WEEKS BEFORE HARVEST. DO NOT HARVEST TREATED GRAPE LEAVES FOR HUMAN CONSUMPTION.

GRAZING

ALL TREATED CROPS (except cotton, azuki beans, chickpeas, faba beans, mungbeans, soybeans): DO NOT ALLOW LIVESTOCK TO GRAZE CROPS OR VEGETABLE WASTE (EXCEPT Tomato Pomace) THAT HAS BEEN TREATED WITH QUANTUM INDOXACARB 300 WG INSECTICIDE.

Cotton: DO NOT ALLOW LIVESTOCK TO GRAZE CROPS, COTTON STUBBLE OR GIN TRASH TREATED WITH QUANTUM INDOXACARB 300 WG INSECTICIDE.

Azuki beans, chickpeas, faba beans, mungbeans, soybeans: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.

TRADE ADVICE

EXPORT STATEMENT: Import tolerances for produce treated with Quantum Indoxacarb 300 WG Insecticide may be pending in some countries. Consult with your exporter or Quantum Agrosiences Holdings Pty Ltd before applying Quantum Indoxacarb 300 WG Insecticide to crops intended for export.

LIVESTOCK DESTINED FOR EXPORT MARKETS

The label withholding period for grazing only applies to stock slaughtered for the domestic market. Some export markets apply different standards. To meet these standards, ensure that the Export Slaughter Interval or the Export Grazing Intervals is observed before stock are sold or slaughtered.

EXPORT SLAUGHTER INTERVAL (ESI): 28 DAYS

Livestock that have been grazing on or fed treated crops and/or over-sprayed should be placed on clean feed for 28 days (4 weeks) prior to export slaughter.

GENERAL INSTRUCTIONS

Quantum Indoxacarb 300 WG Insecticide is an oxadiazine insecticide in the form of a water dispersible granule. Quantum Indoxacarb 300 WG Insecticide has been specifically designed for use in Integrated Pest Management (IPM) schemes. It is particularly active on Lepidopteran insect pests, primarily as a larvicide. Before application of Quantum Indoxacarb 300 WG Insecticide careful monitoring of pest population of eggs and larvae should be undertaken to determine the need for application, the correct timing of the initial application and of any subsequent applications. For Cotton only, subsequent applications are dependent on economic thresholds, as well as the growth rate of new unprotected cotton terminals. For *Helicoverpa* species, spray application should be timed to coincide with egg hatching and before larvae are entrenched in protected feeding sites.

The active ingredient, Indoxacarb, enters larvae primarily by ingestion of treated foliage, or through penetration of the insect cuticle. After ingesting Indoxacarb, the larvae cease feeding and die three to five days later. Quantum Indoxacarb 300 WG Insecticide does not give traditional larval "knockdown" control but controls nominated larvae species giving superior:

- square, flower and boll protection in cotton OR
- foliage, flower and pod protection in Chickpeas, Faba beans, Mungbeans or Soybeans.

PRODUCT USE

MIXING

Always add dry Quantum Indoxacarb 300 WG Insecticide to water in tank. DO NOT premix or slurry.

With the exception of products in water-soluble bags, Quantum Indoxacarb 300 WG Insecticide must be in suspension in the tank before adding companion products or surfactant.

Fill spray tank to ¼ to ½ full of water. Measure the amount of Quantum Indoxacarb 300 WG Insecticide required for the area to be sprayed. Add Quantum Indoxacarb 300 WG Insecticide directly to the spray tank with the agitation engaged. Mix thoroughly to disperse the insecticide. Once dispersed, the material must be kept in suspension at all times by continuous agitation. Use mechanical or hydraulic means, DO NOT use air agitation, premix or slurry.

If spray solution is left standing, ensure thorough reagitation of the spray mix until fully resuspended. DO NOT allow spray mix to sit overnight, as resuspension may be difficult.

Surfactant/Wetting agent

Apricots, Apples, Capsicum, Eggplant, Grapes, Leafy vegetables, Nashi Pears, Nectarines, Peaches, Pears, Peppers, Plum, Tomatoes: use a non-ionic surfactant/wetting agent at 15g active/100L, (e.g. Agral® 600 @ 125 mL/100L or Citowett® @ 75 mL/100L).

Broccoli, Brussels sprouts, Cabbage, Cauliflower: use a non-ionic surfactant/wetting agent at 75 g active/100 L, (e.g. Agral® 600 @ 125 mL/100 L or Citowett® @ 75 mL/100 L).

DO NOT add a non-ionic surfactant/wetting agent if:

- Mixing with another product which already contains a surfactant and/or the product label advises not to add a surfactant.
- Mixing with a liquid fertilizer.

DO NOT use BS1000* or Activator-90* as it may cause crop phytotoxicity.

APPLICATION

Dilute Spraying

- Use sprayer designed to apply high volumes of water up to the point of run-off and matched to 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 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 100L 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

- Use a sprayer designed and set up for 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 spraying can be calculated in the following way:

EXAMPLE ONLY

1. Dilute spray as determined above: for example 1,500 L/ha
2. Your chosen concentrate spray volume: For example 500 L/ha
3. The concentration factor in this example is 3X (i.e. $1,500 \text{ L} \div 500 \text{ L} = 3$)
 - If the dilute label rate is 25 g/100L, then the concentrate rate becomes 3x25, that is 75g/100L of concentrate spray. 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.
 - For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

Ground Application

Use a boom sprayer fitted with high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size, DOES NOT improve canopy penetration and may increase drift potential. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE. Use nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low application drift nozzles. When applying Quantum Indoxacarb 300 WG Insecticide by ground application, keep the boom low to avoid spray drift.

For orchard/vineyard sprayers avoid directing spray above trees and always turn-off outward pointing nozzles at row ends and out rows.

Cotton, Azuki Beans, Chickpeas, Faba Beans, Mungbeans, Soybeans: Apply as a blanket spray or as a banded spray to all crops. Ensure thorough spray coverage on the foliage, using appropriate fan nozzles. Apply in a minimum spray volume of 100 L/ha and keep the boom low to avoid spray drift. A minimum spray pressure of 275 kPa (40 psi) should be used with fan nozzles applying insecticides. For band spraying, increase the number of fan nozzles per crop row as the plant size increases.

Aerial application

Quantum Indoxacarb 300 WG Insecticide must only be applied with aircraft fitted with accurately calibrated equipment. Apply a minimum total spray volume of 30L/ha with nozzles (e.g. Micronaire rotary atomizer, CP nozzles or conventional hydraulic nozzles) set to medium spray droplet quality. A spray drift minimization strategy, should be employed at all times when applying this product. DO NOT apply Quantum Indoxacarb 300 WG Insecticide using Ultra Low Volume (ULV) methods.

Spray Equipment Cleanout

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce risk of forming hardened deposits that might become difficult to remove. Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom, and nozzles with clean water. Loosen and physically remove all visible deposits. Clean all other associated application equipment.

INSECTICIDE RESISTANCE WARNING

For insecticide resistance management Quantum Indoxacarb 300 WG Insecticide is a Group 22A insecticide. Some naturally occurring insect biotypes resistant to Quantum Indoxacarb 300 WG Insecticide and other Group 22A insecticides may exist through normal genetic variability in any insect population. The resistant individuals can eventually dominate the insect population if Quantum Indoxacarb 300 WG Insecticide or other Group 22A insecticides are used repeatedly. The effectiveness of Quantum Indoxacarb 300 WG Insecticide on resistant individuals could be significantly reduced. Since the occurrence of resistant individuals is difficult to detect prior to use Quantum Agrosociences Holdings Pty Ltd, accepts no liability for any losses that may result from the failure of Quantum Indoxacarb 300 WG Insecticide to control resistant insects. Quantum Indoxacarb 300 WG Insecticide may be subject to specific resistance management strategies. To help prevent the development of resistance to Quantum Indoxacarb 300 WG Insecticide use Quantum Indoxacarb 300 WG Insecticide in accordance with the current Insecticide Resistance Management (IRM) Strategy for your region. Cultivate all cotton fields as soon as possible after picking to destroy overwintering pupae of *Helicoverpa armigera*. For further information contact your local supplier, Quantum Agrosociences Holdings Pty Ltd representative or local department agronomist.

GROUP	22A	INSECTICIDE
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PRECAUTIONS

DO NOT use human flaggers/ markers unless they are protected by engineering controls such as vehicles with enclosed cabs.

RE ENTRY PERIOD: DO NOT allow entry into treated areas until spray has dried. When prior entry is necessary, wear cotton overalls (or equivalent clothing) and chemical resistant gloves. Clothing must be laundered after each day's use.

PROTECTION OF HONEYBEES AND OTHER INSECT POLLINATORS.

Toxic to bees. DO NOT apply when bees are actively foraging. Avoid direct application or drift of the spray mix onto beehive. After the spray has dried, bees can safely forage flowering crops.

AVOID SPRAY DRIFT ONTO ADJOINING PROPERTIES OR STOCK AREAS.

Assess the treatment area before application to identify animal exposure risks. Avoid aerial application if possible. Observe the buffer zones for aerial and ground application. If unexpected conditions cause spray drift to contaminate land that livestock could potentially graze seek advice from Quantum Agrosociences Holdings Pty Ltd.

PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS

DO NOT apply under weather conditions, or from spraying equipment, that may cause spray to drift onto near-by non-target plants/crops, cropping lands or pastures. Refer to the Product Use section above and the Cotton industry's Best Management Practice Manual to manage spray drift during application.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

DO NOT contaminate streams, rivers or waterways with the chemical or used containers. Retain irrigation water and DO NOT allow the chemical to enter adjacent paddocks, crops or water supplies.

PROTECTION OF NON-TARGET BENEFICIAL INSECTS

Beneficial insects contribute to control of secondary pest outbreak. Quantum Indoxacarb 300 WG Insecticide applications are unlikely to affect spiders and lacewings. Applications MAY temporarily reduce population of predatory beetles, transverse ladybirds, ants and pirate bugs, but populations quickly recover.

STORAGE AND DISPOSAL

Store in the closed original container in a cool, dry, well-ventilated area. DO NOT store for prolonged periods in direct sunlight. Store in a locked room or place away from children, animals, food feedstuffs and fertilizers.

FOR HDPE CONTAINERS: 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 for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500mm 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 and product.

FOR PLASTIC AND FOIL BAGS: Single-rinse or shake remainder into spray tank/water/ dip/ drench, etc. Do not dispose of undiluted chemicals on site. 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

Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. When opening the container and preparing the spray wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length chemical resistant gloves and face shield or goggles. When using the prepared spray wear cotton overalls buttoned to the neck and wrist, a washable hat, and elbow-length chemical resistant gloves. If product in eyes, wash it out immediately with water. Wash hands after use. After each day use wash gloves, face shield or goggles, and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre (telephone 13 11 26)

SAFETY DATA SHEET

For further information refer to Safety Data Sheet (SDS) which can be obtained from the supplier.

CONDITIONS OF SALE: Quantum Agrosciences Holdings Pty Ltd shall not be liable for any loss injury damage or death whether consequential or otherwise whatsoever or howsoever arising whether through negligence or otherwise in connection with the sale supply use or application of this product. The supply of this product is on the express condition that the purchaser does not rely on Quantum Agrosciences Holdings Pty Ltd's skill or judgement in purchasing or using the same and every person dealing with this product does so at his own risk absolutely. No representative of Quantum Agrosciences Holdings Pty Ltd has any authority to add to or alter these conditions.

Additional information required under the Globally Harmonised System (GHS) classification of the substance/mixture: **Harmful if swallowed. May cause an allergic skin reaction. Causes eye irritation. Harmful if inhaled. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.**



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