Product Name: Sabakem Indoxacarb 150 EC Insecticide
APVMA Approval No: 86983/117231

RLP APPROVED

Label Name:	Sabakem Indoxacarb 150 EC Insecticide

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

Constituent Statements:	ACTIVE CONSTITUENT: 150 g/L S-INDOXACARB

Mode of Action:	GROUP 22A INSECTICIDE

Statement of Claims:	For the control of various species of insect pests in Azuki beans, Chickpeas, Cotton, Faba beans, Mungbeans and Soybeans as per the Directions for Use table.

Net Contents:	Contents: 1 L to 200 L.

Restraints:	Restraints DO NOT apply if rain is expected within 2 hours of application, or if heavy dew is present on crops. DO NOT apply when wind speed is less than 3 and greater than 20 kilometers per hour or during weather conditions when surface temperature inversions can develop. DO NOT apply within 50 m (aerial application) or 20 m (ground application) when there are livestock, pasture or any land that is producing feed for livestock downwind from the application area. 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. ADZUKI BEANS, CHICKPEAS, FABA BEANS, MUNGBEANS, SOYBEANS: DO NOT apply more than one (1) application per field for the crops entire growth cycle.

	ENSURE YOU READ THE PROTECTION STATEMENTS BEFORE APPLYING THE PRODUCT.

Directions for Use:	This section contains file attachment.

Other Limitations:	

Withholding Periods:	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. GRAZING COTTON: DO NOT ALLOW LIVESTOCK TO GRAZE CROPS, COTTON STUBBLE OR GIN TRASH TREATED WITH SABAKEM INDOXACARB 150 EC INSECTICIDE. AZUKI BEANS, CHICKPEAS, FABA BEANS, MUNGBEANS, SOYBEANS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.

Trade Advice:	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 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:	This section contains file attachment.

Resistance Warning:	INSECTICIDE RESISTANCE WARNING GROUP 22A INSECTICIDE For insecticide resistance management Sabakem Indoxacarb 150 EC Insecticide is a Group 22A insecticide. Some naturally occurring insect biotypes resistant to Sabakem Indoxacarb 150 EC 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 Sabakem Indoxacarb 150 EC Insecticide and other Group 22A insecticides are used repeatedly. The effectiveness of Sabakem Indoxacarb 150 EC Insecticide on resistant individuals could be significantly reduced. Since occurrence of resistant individuals is difficult to detect prior to use, Sabakem Pty Ltd. Limited accepts no liability for any losses that may result from failure of Sabakem Indoxacarb 150 EC Insecticide to control resistant insects. Strategies to minimize the risk of insecticide resistance are available. To help prevent the development of resistance of Sabakem Indoxacarb 150 EC Insecticide observe the following instructions: • Use Sabakem Indoxacarb 150 EC 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 supplier, Sabakem Pty Ltd representative or local agricultural department agronomist.

Precautions:	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 buttoned to the neck and wrists, a washable hat and chemical resistant gloves. Clothing must be laundered after each day's use.

Protections:	PROTECTION OF LIVESTOCK Dangerous to bees. DO NOT apply when bees are actively foraging. Avoid direct application or drift of the spray mix onto beehives. 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 where possible. Observe the buffer zones for aerial and ground application. If unexpected conditions cause spray drift onto pasture or fodder crops that livestock may potentially graze or may be cut for livestock feed, seek advice from Sabakem Pty Ltd. 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 outbreaks. Sabakem Indoxacarb 150 EC Insecticide applications are unlikely to affect spiders and lacewings. Applications MAY temporarily reduce populations of predatory beetles, transverse ladybirds, ants and pirate bugs, but populations quickly recover. 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 nearby 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.

Storage and Disposal:	STORAGE AND DISPOSAL Store in the 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. Returnable/refillable containers:

	For returnable containers, empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

Safety Directions:	SAFETY DIRECTIONS Harmful if swallowed. Will irritate the eyes and skin. Avoid contact with eyes and skin. Repeated exposure may cause allergic disorders. Sensitive workers should use protective clothing. When opening the container, preparing spray and using prepared spray, wear cotton overalls buttoned to the neck and wrist [or equivalent clothing], a washable hat and elbow-length PVC gloves. Wash hands after use. After each day's use, wash gloves and contaminated clothing.

First Aid Instructions:	FIRST AID If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

First Aid Warnings:	

DIRECTIONS FOR USE:

CROP	PEST	STATE	RATE	CRITICAL COMMENTS.
Cotton	Cotton bollworm (*Helicoverpa armigera*), Native budworm (*H. punctigera*)	NSW, NT, Qld, WA only	650 mL/ha or 850 mL/ha	Use the lower rate of Sabakem Indoxacarb 150 EC Insecticide when: (1) *H. armigera* 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 Sabakem Indoxacarb 150 EC Insecticide when: (1) *H. armigera* 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.
	Cotton bollworm (*Helicoverpa armigera*), Native budworm (*H. punctigera*)		650 mL/ha + 2 L/ha Ovasyn* insecticide (or 200 g/L Amitraz EC formulation)	Use Sabakem Indoxacarb 150 EC Insecticide + Ovasyn* or 200 g/L Amitraz EC when: (1) egg and larvae pressure ARE AT 15 - 20 brown eggs and 2 very small (first instar) or small larvae (second instar) per 10 cotton terminals AND (2) where limited preservation of beneficial insects is required.
	Green mirid (*Creontiades dilutus*)		650 mL/ha or 850 mL/ha or 300 or 400 mL/ha + salt (NaCl) at 5 g/L spray volume by ground (100 L/ha) or 10 g/L spray volume by air (30 L/ha)	Target nymphs and/or adults when they reach the economic spray threshold. Use 650 or 850 mL/ha when controlling *Helicoverpa* spp. AND green mirids. Refer Heliothis recommendations. Use 300 or 400 mL/ha + salt when controlling green mirids ONLY. 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: Sabakem Indoxacarb 150 EC Insecticide has limited residual activity in controlling new infestations of mirids (either new hatchings of nymphs or influx of adults) post-spray.

CROP	PEST	STATE	RATE	CRITICAL COMMENTS.
Chickpeas Faba beans	Cotton Bollworm *(H. armigera)* Native budworm *(H. punctigera)*	All States	300 mL/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.
Azuki beans Mungbeans Soybeans	Cotton Bollworm *(H. armigera)* Native budworm *(H. punctigera)*		400 mL/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.
	Mirid complex: Green mirid (*C. dilutus*), Brown mirid (*C. pacificus*), Crop mirid (*Sidnia kingbergii*), Yellow mirid (*Campylomma liebknechtl*)		400 mL/ha + salt (NaCl) at 5 g/L spray volume by ground (100 L/ha) or 10 g/L spray volume by air (30 L/ha).	Target nymphs and/or adults when they reach the economic spray threshold. **Under high populations suppression only may be observed.** Please note: Sabakem Indoxacarb 150 EC has limited residual activity in controlling new infestations of mirids (either new hatchlings of nymphs or influx of adults) post spray.
	Soybean looper (*Thysanoplusia orichalcea*)		200 mL/ha	Target hatchling (neonates or first instar) to small larvae (second instar) when they reach the economic spray threshold.
	Red shouldered leaf or Monolepta beetle (*Monolepta australis*) **Soybeans only**		200 mL/ha	Target adult beetles when they reach the economic spray threshold. Ensure thorough spray coverage.

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

GENERAL INSTRUCTIONS
Sabakem Indoxacarb 150 EC Insecticide is an emulsifiable concentrate formulation.

Sabakem Indoxacarb 150 EC Insecticide should be applied after careful field monitoring of pest populations of eggs and larvae 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 applications should be timed to coincide with egg hatching and before larvae are entrenched in protected feeding sites.

Sabakem Indoxacarb 150 EC has been specifically designed for use in Integrated Pest Management schemes. 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. Sabakem Indoxacarb 150 EC 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 Chickpea, Faba beans, Mungbeans or Soybeans.

PRODUCT USE
The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator must consider all these factors when making application decisions and determining off-target drift risks near the application. A spray drift minimisation strategy, should be employed at all times when applying this product.

APPLYING LARGER DROPLETS (volume median diameter (VMD) 150-250 microns) REDUCES DRIFT POTENTIAL BUT WILL NOT MINIMISE DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVOURABLE ENVIRONMENTAL CONDITIONS. Larger droplets may reduce the effects of evaporation.

Mixing
Use only clean water. Half fill the spray tank with water and add the appropriate amount of Sabakem Indoxacarb 150 EC Insecticide directly to the spray tank, agitate and add Ovasyn* or amitraz 200 g/L EC, (if applicable), then completely fill the tank. Mix thoroughly and continue mechanical or hydraulic agitation.

Storage of spray mixture
Use the prepared spray immediately. If unforeseen conditions prevent immediate use of the Sabakem Indoxacarb 150 EC Insecticide spray mix; the mix may be stored up to 72 hours. Before use, thoroughly agitate the spray mix until fully resuspended. Mixtures of Sabakem Indoxacarb 150 EC Insecticide plus Ovasyn* or Amitraz 200 g/L EC should not be stored.

Application
Application equipment should be calibrated to apply at least sixty (60) droplets per cm^2 of target foliage. Droplet VMD should be of medium spray quality according to ASAE S572 definition for standard nozzles.

Ground application
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. 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. For band spraying, increase the number of fan nozzles per crop row as the plant size increases.

Aerial application
Sabakem Indoxacarb 150 EC Insecticide must only be applied with aircraft fitted with accurately calibrated equipment.
Apply a minimum total spray volume of 30 L/ha with nozzles (e.g. Micronaire rotary atomisers, CP nozzles or conventional hydraulic nozzles) set to medium spray quality according to ASAE S572 definition for standard nozzles. A spray drift minimisation strategy, should be employed at all times when applying this product.
DO NOT apply Sabakem Indoxacarb 150 EC Insecticide using Ultra Low Volume (ULV) methods.

Compatibility:
Label instructions for all products must be observed.
Sabakem Indoxacarb 150 EC Insecticide is compatible with Ovasyn insecticide, Amitraz 200 g/L EC formulations and mepiquat chloride.
Sabakem Indoxacarb 150 EC Insecticide is not compatible with ultra low volume (ULV) formulations or the following foliar fertilisers: Supa K 30, Zip and Triple 7. Since formulations may be changed and new ones introduced, it is recommended that users pre-mix a small quantity of the desired tankmix and observe possible adverse changes (settling out, flocculation etc).

Salt
When the addition of salt is indicated in the Directions for Use table, Sabakem Pty Ltd recommends the use of salt from the following sources: Table or cooking salt, Pool salt, or salt approved for use in livestock feed e.g. Cheetham RAM (No.2) Dried Fine Salt, Olsson's Kiln Dried Course Refined Salt.

Spray Equipment Cleanout
Only apply product using clean, well maintained equipment. Immediately following application, thoroughly clean all spray equipment to reduce risk of deposits forming that might become difficult to remove.

Drain spray equipment into a disposal pit designed for this purpose. Thoroughly rinse sprayer and flush hoses, boom, and nozzles with clean water. Fill the sprayer with clean water and household ammonia (one litre of 3 % active for every 100 L of water). Flush hoses, boom, and nozzles. Turn off boom and top off the tank with clean water. Circulate through the spraying system for at least 15 minutes. Flush the hoses, boom and nozzles and drain the tank. Remove and clean nozzles, screens, and strainers in a bucket of fresh ammonia and water. Thoroughly rinse the sprayer, hoses, boom and nozzles with clean water several times. Clean all other associated contaminated application equipment.