SAFETY DIRECTIONS

Harmful if swallowed. Will irritate the eyes and skin. May irritate the nose and throat. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. Do not inhale vapour. When opening the container, preparing spray and using the product, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow-length PVC gloves and goggles. 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 and contaminated clothing.

FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Phone Australia 13 11 26, New Zealand 0800 764 766. If swallowed do NOT induce vomiting. If in eyes wash out immediately with water.

SAFETY DATA SHEET

Additional information is listed on the Safety Data Sheet which is available from PCT Holdings Pty Ltd on request. Call Customer Service Toll Free on 1800 630 877 or visit our web site at http://pct.au.com

May cause damage to organs (nervous system). May cause damage to organs (blood system, body weight effects) through prolonged or repeated exposure. DO NOT breathe spray. DO NOT eat, drink or smoke when using this product. IF ON SKIN: Wash with plenty of soap and water.

CONDITIONS OF SALE

PCT Holdings Pty Ltd warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with Directions for Use under normal conditions of use. No warranty of merchantability or fitness for a particular purpose, express or implied, extends to the of the product contrary to label instructions or under off-label permits not endorsed by PCT Holdings Pty Ltd or under abnormal conditions.

POISON

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



ASSAULT 150 EC*

INSECTICIDE

ACTIVE CONSTITUENT: 159.6 g/L INDOXACARB (94:6) sufficient to give 150 g/L S-isomer

GROUP **22A** INSECTICIDE

For the control of various species of insect pests in Adzuki beans, Chickpeas, Cotton, Faba beans, Mungbeans and Soybeans as per the Directions for Use.

IMPORTANT: READ THIS BOOKLET BEFORE USE

SPCT

APVMA Approval No: 89722/125895 *SUREFIRE Assault 150 EC is a registered trademark of PCT INTERNATIONAL PTY LTD (PCT Holdings Pty Ltd ABN 11 099 023 962) 5/74 Murdoch Circuit, Acacia Ridge QLD 4110 - http://pctrural.com.au CUSTOMER SERVICE FREECALL 1800 630 877 MERGENCY RESPONSE (ALL HOURS) FREECALL 1800 630 877

DIRECTIONS FOR USE 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 kilometres 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.

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Cotton	Catton bollworm (Helicoverpa amigera) Native budworm (H. punctigera)	NSW, NT, Qld and WA only	650 mL/ha or 850 mL/ha	Use the lower rate of Surefire Assault 150 EC Insecticide when: (1) <i>H. amigera</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 Surefire Assault 150 EC Insecticide when: (1) <i>H. amigera</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
	Cotton bollworm (Helicoverpa armigera) Native budworm (H. punctigera)		650 mL/ha + 2 L/ha Ovasyn* insecticide (or 200 g/L Amitraz EC formulation)	desirable. Use Surefire Assault 150 EC Insecticide + Ovasyn or 200 grL 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 larvae (second instar) per 10 cotton terminals (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	Target nymphs and/or adults when they reach the economic sorty threshold. Use 650 or 650 mL/ha when controlling Heilcoverps opp. AND green minids. Refer Heilothis recommendations. Use 300 or 400 mL/ha + salt when controlling green minids ONL/L Use the higher rate on infestations exceeding economic spray threshold levels and/or large canopy crops. Under high populations suppression only may be observed.
			(30 L/ha).	Note: Surenre Assault 150 EC insecticide has limited residual activity in controlling new infestations of mirids (either new hatchings of nymphs or influx of adults) post-spray.

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 PCT.

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. Surefire Assault 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 NONTARGET 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

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 for appropriate disposal 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.

For Refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

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.

Insecticide Resistance Warning



For insecticide resistance management Surefire Assault 150 EC Insecticide is a Group 22A insecticide. Some naturally occurring insect biotypes resistant to Surefire Assault 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 Surefire Assault and other Group 22A insecticides are used repeatedly. The effectiveness of Surefire Assault and other Group 22A insecticides are used repeatedly. The effectiveness of Surefire Assault and other difficult to detect prior to use, PCT Holdings Pty Ltd accepts no liability for any losses that may result from the failure of Surefire Assault to control resistant insects.

Strategies to minimise the risk of insecticide resistance are available. To help prevent the development of resistance to Surefire Assault 150 EC Insecticide observe the following instructions:

Use Surefire Assault 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 or PCT Holdings Pty Ltd.

PRECAUTION

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.

CROP	PEST	STATE	RATE	CRITICAL COMMENTS
Chickpeas Faba beans	Cotton bollworm (Helicoverpa 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 (particulary relevant to Faba beans) or pods.
Adzuki beans Mungbeans Soybeans	Cotton bollworm (Helicoverpa 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 liebknachti)		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 spry threshold. Under high populations suppression only may be observed. Please note: Surefire Assault 150 EC Insecticide has limited residual activity in controlling new infestations of mirds (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 (<i>Monolepta</i> <i>australis</i>) 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

WITHHOLDING PERIODS HARVEST

COTTON: DO NOT HARVEST FOR 28 DAYS AFTER APPLICATION. ADZUKI BEANS, CHICKPEAS, FABA BEANS, MUNGBEANS, and 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 SUREFIRE ASSAULT 150 EC INSECTICIDE. ADZUKI BEANS, CHICKPEAS, FABA BEANS, MUNGBEANS, and SOYBEANS: DO NOT GRAZE OR CUT FOR STOCK FOOD FOR 21 DAYS AFTER APPLICATION.

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 oversprayed should be placed on clean feed for 28 days (4 weeks) prior to export slaughter.

GENERAL INSTRUCTIONS

Surefire Assault 150 EC Insecticide is an emulsifiable concentrate formulation. Surefire Assault 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. Surefire Assault 150 EC Insecticide 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 cutcle. After ingesting indoxacarb, the larvae cease feeding and die three to five days later. Surefire Assault 150 EC 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 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 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 Surefire Assault 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 Surefire Assault 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 Surefire Assault 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 cm² of target foliage. Apply treatments using settings to produce a **MEDIUM** spray quality.

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

Surefire Assault 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. A spray drift minimisation strategy should be employed at all times when applying this product. DO NOT apply Surefire Assault 150 EC Insecticide using Ultra Low Volume (ULV) methods.

Compatibility: Label instructions for all products must be observed Surefire Assault 150 EC Insecticide is compatible with Ovasyn insecticide, Amitraz 200 g/L EC formulations and Pix (mepiquat chloride). Surefire Assault 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 tank mix and observe possible adverse changes (settling out, flocculation etc).

Salt

When the addition of salt is indicated in the Directions for Use table, PCT 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.