# **Sedaire**<sup>™</sup>

# Contains Indoxacarb, the active ingredient used in Steward® EC Insecticide.

# **Emulsifiable Concentrate**

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# KEEP OUT OF REACH OF CHILDREN CAUTION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you DO NOT understand the label, find someone to explain it to you in detail.)

See below for additional Precautionary Statements.

<b>FIRST AID</b>					
If swallowed:	Call a poison control center or doctor immediately for treatment advice.				
	Have person sip a glass of water if able to swallow.     DO NOT induce vomiting unless told to do so by the poison control center or doctor.				
	<ul> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>				
If on skin or clothing:	Take off contaminated clothing.				
	Rinse skin immediately with plenty of water for 15-20 minutes.				
	Call a poison control center or doctor for treatment advice.				
HOT LINE NUMBER					
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at <b>1-844-685-9173</b> for emergency medical treatment information.					

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

Sedaire™ EC is not manufactured, or distributed by FMC Corporation, seller of Steward® EC Insecticide.



# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if swallowed. Avoid contact with skin or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

# PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt, long pants;
- Shoes, and socks; and
- Chemical-resistant gloves such as: Barrier Laminate, Butyl Rubber  $\geq$  14 mils, Nitrile Rubber  $\geq$  14 mils, Neoprene Rubber  $\geq$  14 mils, Natural Rubber  $\geq$  14 mils, Polyethylene, Polyvinyl Chloride (PVC)  $\geq$  14 mils, and Viton  $\geq$  14 mils.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6), the handler PPE requirements may be reduced or modified as specified in the WPS. **IMPORTANT**: when reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "**applicators and other handlers**" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

#### **User Safety Recommendations**

#### Users should:

- · Remove clothing and/or PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- · Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to mammals, birds, fish and aquatic invertebrates. **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. **DO NOT** apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. **DO NOT** contaminate water when disposing of equipment wash water or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding application when rainfall is forecasted to occur within 24 hours. Rinsing application equipment over the treated area will help avoid runoff to water bodies or drainage systems. **DO NOT** apply to any impervious surfaces which may contact or lead directly to surface water, storm drains, or urban runoff conveyance systems (gutters).

Pollinator Advisory: This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. DO NOT apply this product or allow it to drift to blooming crops or weeds while bees are foraging the treatment area.

# PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix or allow to come in contact with any oxidizing agent. Hazardous chemical reaction may occur.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

# **USE RESTRICTIONS**

- DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- · DO NOT formulate this product into any other end-use products without written permission of Atticus, LLC.
- DO NOT use Sedaire EC in greenhouses.
- DO NOT use Sedaire EC on ornamental plants or plants being grown for ornamental purposes.
- DO NOT use Sedaire EC in residential areas.
- For fields to which applications of **Sedaire EC** will be made, construct a vegetative filter strip if one does not already exist. Existing and new filter strips must be, at a minimum, 10-foot-wide and composed of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds). Vegetative filter strips must be maintained to optimize their utility. Only apply products containing indoxacarb onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.
- · For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# **AGRICULTURAL USE REQUIREMENTS**

Sedaire EC must be used only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

- For early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, wear:
- Coveralls over long-sleeved shirt and long pants;
- Socks plus chemical resistant footwear; and
- Chemical-resistant gloves such as: Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, Natural Rubber ≥ 14 mils, Polyethylene, Polyvinyl Chloride (PVC) ≥ 14 mils, and Viton ≥ 14 mils.

# **PRODUCT INFORMATION**

Sedaire EC is an emulsifiable concentrate that can be applied as a foliar spray to control many important insects. Sedaire EC is diluted with water for application. Always shake well before use.

CHEMIGATION: DO NOT apply this product through any type of irrigation system except for application to alfalfa, corn (field), corn (pop), corn (grown for seed), cotton, peanut, potato, and soybean, and as allowed by Federal Supplemental and Special Local Need (SLN) labeling. (See "Application By Chemigation" section of the label.)

# INTEGRATED PEST MANAGEMENT

Atticus, LLC supports the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an IPM program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other pest detection methods, correct target pest identification, population monitoring, rotation of insecticides with different modes-of-action and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants, product manufacturer or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

## SCOUTING

Monitor insect populations to determine whether or not there is a need for application of **Sedaire EC** based on label recommendations and locally determined economic thresholds. More than one treatment of **Sedaire EC** may be required to control a population of pests.



#### PESTICIDE RESISTANCE MANAGEMENT

For resistance management, **Sedaire EC** contains the active ingredient indoxacarb which is a Mode of Action Group 22A insecticide. Insecticides with the same group number affect the same biological site of action on the target pest and when used repeatedly in the same treatment area, naturally occurring resistant individuals may survive correctly applied insecticide treatments, reproduce, and become dominant.

To delay the development of insecticide resistance, a resistance management strategy should include incorporation of cultural and biological control practices, alternation to different mode of action insecticides on succeeding generations, targeting the most susceptible life stage, and where possible controlling multiple life stages of the same pest.

Consult with your local or state agricultural authorities or product manufacturer, or visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org for more information about developing a resistance management strategy.

Unless directed otherwise in the specific crop/pest sections of this label, follow these guidelines to delay the development of insecticide resistance:

- Apply Sedaire EC and other Group 22A insecticides within a single "treatment widow" to minimize exposing successive generations of a pest species to the same mode of action insecticides.
- A "treatment window" is defined as the period of residual insecticidal activity provided by one or more applications of products with the same mode of action not to exceed approximately 30 days.
- · Within the Group 22A "treatment window", make no more than 2 applications of Sedaire EC or other Group 22A insecticides.
- Following a Group 22A "treatment window", rotate to a "treatment window" of effective insecticides with a different mode of Action Group Number. The period between Group 22A "treatment windows" should be at least 30 days.
- For short cycle crops (< 50 days), the duration of the crop cycle may be considered as the Group 22A "treatment window" if no Group 22A insecticides are used during the next crop cycle at the same farm location.
- If Sedaire EC is tank mixed with other insecticides, then apply rates that are individually registered for use against the target species. DO NOT rely on the same mixture repeatedly to control the same pest species and follow
  the same "treatment window" rotation recommendation described above for the tank-mixed products.
- · Use labeled rates of Sedaire EC when applied alone or in tank mixtures.
- Monitor after application for unexpected target pest survival. If insect resistance is suspected consult with your manufacturer's representative, local university specialist, or certified pest control advisor.
- If resistance to Sedaire EC develops in your area other products with a similar mode of action (Mode of Action Group 22A) may not provide adequate control.

#### BENEFICIAL ARTHROPODS

Other than reducing the target pest species as a food source, **Sedaire EC** helps conserve certain beneficial arthropods, including parasitic wasps, predatory mites, big-eyed bugs, damsel bugs, minute pirate bugs, and spiders. While these beneficial arthropods cannot be relied upon to control pests, they are of potential value and can be monitored along with pests in pest management programs on these crops.

#### APPLICATION

Apply at the listed rates when insect populations reach locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

#### Sedaire EC applications should target eggs and small instar larvae.

Follow-up treatments of **Sedaire EC** should be applied, as needed, to keep pest populations within threshold limits. Apply **Sedaire EC** at 5 to 7 day intervals or as needed to manage specific target insect pests, as specified in the specific crop sections, to maintain control.

Use sufficient water to obtain thorough, uniform coverage.

Because **Sedaire EC** is most effective through ingestion of treated plant material, thorough spray coverage is essential for optimum control of targeted pest insects. Using increased water volumes will typically result in better spray coverage, especially under adverse conditions such as dry, hot weather or dense plant foliage. **Sedaire EC** may be applied by ground, aerial or overhead sprinkler chemigation application equipment. For aerial application, use the following directions unless otherwise specified in specific crop/pest sections of this label or EPA-approved supplemental labeling: use a minimum of 3 gal water per acre (gpa), minimum of 5 gal water per acre in Arizona and California. For ground application, use the following directions unless otherwise specified in specific crop/pest sections of this label or EPA-approved supplemental labeling: use a minimum of 5 gal. water per acre. Higher gallonage will provide better coverage and performance. For overhead chemigation applications, see **"Application by Chemigation"** section of the label for guidance on water volumes to be used.

Use of Adjuvants: In some situations where coverage is difficult to achieve such as closed canopy, dense foliage, plants with waxy leaf surfaces, or less than optimum application equipment, an adjuvant may improve performance. Use only adjuvant products that are labeled for agricultural use and follow the directions on the manufacturer's label.

#### SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying Sedaire EC. Fill spray tank 1/4 to 1/2 full of water. Add Sedaire EC directly to spray tank. Mix thoroughly to fully disperse the insecticide; once dispersed continued agitation is required. Use mechanical or hydraulic means; DO NOT use air agitation.

Spray mix must not be stored overnight in spray tank. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures.

Tank Mixing and Compatibility - Since formulations may be changed and new ones introduced, it is a best practice that users premix a small quantity of a desired tank mix and observe for possible physical incompatibility (settling out, flocculation, crystallization, etc.). It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. **DO NOT** exceed label application rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

Spray volumes of less than 3 gal of water and tank mixtures of more than two products can increase the chances of incompatible spray mixtures. A jar test (as described below) should be conducted when label guidance is not given or prior experience with a specific tank mixture is unknown. The jar test should follow the mixing sequence below in water volume proportional to the planned spray tank water volume to assure that the tank mixture is compatible. Constant agitation may be needed during mixing and spraying of mixtures. **Sedaire EC** is compatible with most commonly used plant protectants.

Steps to conduct a jar test to determine physical tank mix compatibility of Sedaire EC with other products:

- Add clean water to the jar in proportion to the planned water volume that will be used in the spray tank (a jar size of 16 oz is acceptable).
- While wearing the most restrictive PPE, mix proper proportional amounts of **Sedaire EC** and desired tank mix partner(s) as will be present in the spray tank. Add one product at a time following the sequence of addition according to formulation type provided in this label.
- Seal and shake mixture after each product is added.
- Allow to stand for 1 hour.
- View jar to determine if settling, flocculation, crystallization or any other undesirable changes have happened.
- If none of the above is observed or the solution can be easily remixed after shaking, the mixture is compatible with Sedaire EC.
- · If the tank mixture is not compatible, a higher water volume, reduced rate of the tank mix partner(s), reduced number of tank mix partners or a compatibility agent may be needed.

#### **Tank Mixtures and Crop Safety**

Crop varieties can differ in their responsiveness to tank mixtures, and environmental conditions can influence product performance and crop response. It is not possible to test **Sedaire EC** alone or with all possible tank mix combinations on all varieties under all environmental conditions. When considering the use of a tank mixture on a labeled crop without prior experience, or which is not specifically described on **Sedaire EC** product labeling or in other Atticus, LLC product use instruction, it is important to check crop safety first. To test for crop safety prepare a small volume of the intended tank mixture, apply it to an area of the target crop as directed by both this and the tank mix partner product labels, and observe the treated crop to ensure that a phytotoxic response does not occur.

Use of **Sedaire EC** in any tank mixture applications that is not specifically described on **Sedaire EC** product labeling or in other Atticus, LLC product use instructions, could potentially result in crop injury. Follow the precautions on this label and on the label for any other product to be used in tank mixtures before making such applications to your crops. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.



#### Tank Mixing Sequence - Add different formulation types in the sequence indicated below.\* Allow time for complete mixing and dispersion after addition of each product.

- Products in water soluble bags (WSB)
- 2. Water soluble granules (SG)
- 3. Water dispersible granules (WG, XP, DF)
- 4. Wettable powders (WP)
- 5. Water based suspension concentrates (SC)
- 6. Water soluble concentrates (SL)
- 7. Suspoemulsions (SE)
- 8. Oil Based suspension concentrates (OD)
- 9. Sedaire EC or other emulsifiable concentrates (EC)
- 10. Surfactants, oils, or adjuvants
- 11. Soluble fertilizers
- 12. Drift retardants

\*Unless otherwise specified by manufacturer directions for use or by local expertise.

#### SPRAY TANK CLEANOUT

Prior to application, start with clean, well maintained application equipment. Immediately following application, thoroughly clean all spray equipment to reduce the risk of forming hardened deposits which might become difficult to remove.

Drain spray equipment. Thoroughly rinse sprayer and flush hoses, boom and nozzles with clean water.

Clean all other associated application equipment. Take all necessary safety precautions when cleaning equipment. **DO NOT** clean near wells, water sources or desirable vegetation. Dispose of waster in accordance with local regulations.

# APPLICATION BY CHEMIGATION – ALFALFA, CORN (FIELD), CORN (GROWN FOR SEED), CORN (POP), COTTON, PEANUT, POTATO, AND SOYBEAN

#### Instructions for the Use of Sedaire EC in Overhead Sprinkler Chemigation Systems:

Overhead chemigation applications offer the advantage of greater penetration and coverage of the target plant. However, typical chemigation applications are more dilute than ground or aerial applications. For best results, it is recommended to keep the concentration of **Sedaire EC** as high as possible in the application. Apply **Sedaire EC** in 0.1 to 0.2 inches of water per acre. **Sedaire EC** is most active as an ingestion insecticide, although it does have activity as a direct contact insecticide. For best results, applications of **Sedaire EC** should ensure thorough coverage of the target plant to maximize the opportunity for target insects to ingest **Sedaire EC**.

#### Types of Chemigation Systems:

Sedaire EC may be applied only through overhead sprinkler irrigation systems. Overhead irrigation systems include the following; center pivot, end tow, hand move, lateral move, side roll, solid set and wheel line. Center pivot and lateral move irrigation systems are preferred. Other overhead sprinkler systems may be used if they provide uniform water distribution. DO NOT apply Sedaire EC through any other type of irrigation system. DO NOT use filter screens smaller than 50 mesh throughout the system, due to possible buildup of material on 100 mesh or smaller screens.

#### Directions for Chemigation:

# Preparation

A pesticide tank is recommended for the application of **Sedaire EC** in chemigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. With the mix tank 1/4 to 1/2 full with water and the agitator running, measure the required amount of **Sedaire EC** and add it to the tank. Then add additional water to bring your total pesticide mixture up to the desired volume for your application. Note: Always add the **Sedaire EC** to water, never put **Sedaire EC** into a dry tank or other mixing equipment without first adding water. See **"Tank Mixing Sequence"** section of the container label for tank mixing sequence. Continue to agitate the mixture throughout the application process. Use mechanical or hydraulic agitation, **DO NOT** use air agitation. Highly alkaline water should be buffered so that the pH of the spray solution is in the range of neutral to slightly acidic.

# **Injection Into Chemigation Systems**

Inject the proper amount of **Sedaire EC** into the irrigation water flow using a positive displacement injection pump. Injection should occur at a point in the main irrigation water flow to ensure thorough mixing with the irrigation water. For continuously moving systems, inject the solution containing **Sedaire EC** into the irrigation waterline continually and uniformly throughout the irrigation cycle. Apply in no more than 0.2 inches of water per acre. For overhead sprinkler systems that are stationary, add the solution containing **Sedaire EC** to the irrigation water line and apply no more than 0.2 inches of water per acre just before the end of the irrigation cycle.

#### **Uniform Water Distribution**

The irrigation system used for application of **Sedaire EC** must provide for uniform distribution of **Sedaire EC** treated water. Non-uniform distribution might result in crop injury, lack of effectiveness or illegal pesticide residues in or on the crop being treated. Ensure the irrigation system is calibrated to uniformly distribute the chemigation application to the crop. Contact the equipment manufacturer, the local University Extension agent or other experts if you have questions about achieving uniform distribution of the application.

#### **Equipment Calibration**

Calibrate the irrigation system and injector before applying **Sedaire EC**. Calibrate the injection pump while the system is running using the expected irrigation rate. If you have questions about calibration, you should contact your state extension service specialists, equipment manufacturer or other experts.

#### **Monitoring of Chemigation Applications**

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of a responsible person, shall shut the system down and make necessary adjustments should the need arise. Wear the personal protective equipment as defined in the PPE section of the label for applicators and other handlers when making adjustments or repairs on the chemigation system when **Sedaire EC** is in the irrigation water.

#### **Required System Safety Devices**

DO NOT connect any irrigation system used for pesticide applications to a public water system unless the pesticide label prescribed safety devices are in place. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals at least 60 days out of the year.

- 1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.



#### Operation

Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injection system according to the directions above. This procedure is necessary to deliver the desired rate per acre in a uniform manner. When the application is finished, allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system.

- End guns must be turned off during the application, if they irrigate nontarget areas or if they DO NOT provide uniform application and coverage.
- · Plug nozzles in the immediate area of control panels, chemical supply tanks and system safety devices to prevent contamination of these areas.
- DO NOT apply when wind speed favors drift beyond the area intended for treatment.
- · DO NOT apply when system connections or fittings leak or when nozzles DO NOT provide uniform distribution.
- **DO NOT** allow irrigation water to collect or run-off during chemigation.

#### **Cleaning the System**

Thoroughly clean the injection system and tank of any fertilizer or chemical residues using a standard clean-out procedure. Dispose of any residues in accordance with State and Federal laws. Consult your owner's manual or your local equipment dealer for cleanout procedures for your injection system.

## **SPRAY DRIFT**

#### **Aerial Applications:**

- · DO NOT release spray at a height greater than 10 feet above the ground or vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- DO NOT apply when wind speeds exceed 15 mph at the application site. If the wind speed is greater than 10 mph, the boom length must be 65% or less for fixed-wing aircraft and 75% or less for helicopters. Otherwise, the boom length must be 75% or less for fixed-wing aircraft and 90% or less for helicopters.
- **DO NOT** apply during temperature inversions.

#### Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- · Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 mph at the application site.
- DO NOT apply during temperature inversions.

#### **Airblast Applications:**

- · Sprays must be directed into the canopy.
- DO NOT apply when wind speeds exceed 15 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- DO NOT apply during temperature inversions.

#### **SPRAY DRIFT ADVISORIES**

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

#### IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

#### **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

#### **Controlling Droplet Size – Aircraft**

Adjust Nozzles - Follow nozzle manufacturer's recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **BOOM HEIGHT – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

#### RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.

#### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

# AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift is not occurring.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.



# **CROP ROTATION**

Crops on this label and the following crops or crop groups may be planted immediately following harvest: Bean, dried (crop subgroup 6C); Bean, succulent (crop subgroups 6A, 6B); Bushberries (crop subgroup 13-07B); Cucurbit vegetables (crop subgroups 9A, 9B); Fruiting vegetables (crop subgroups 8-10A, 8-10B, 8-10C); Garden beets; Grapes; Leafy green vegetables (crop subgroup 4A); Leafy petiole vegetables (crop subgroup 4B); Low growing berry (except strawberry) (crop subgroup 13-07H); Mint (peppermint & spearmint); Okra; Pome fruit (crop group 11); Small fruit vine climbing subgroup (except fuzzy kiwifruit) (crop subgroup 13-07F); Stone fruit (crop group 12); Sweet corn; Tuberous and corm vegetables (crop subgroup1C): arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna (Queensland arrowroot), bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, potato, sweet potato, tanier (cocoyam), tumeric, yam bean (jicama,manoic pea) and true yam).

DO NOT plant for food or feed any other crops not registered for use with indoxacarb for 30 days after last use.

# **USE SITES**

Crops	Insects	Lb Al	FI Oz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
Alfalfa	Cabbage looper**	0.045 - 0.11	4.6 - 11.3	11.5 - 27.8	7	12 hrs.
and alfalfa	Grasshoppers				For alfalfa, harvest is defined as	
grown for seed	Alfalfa caterpillar	0.065 - 0.11	6.7 - 11.3	11.5 - 19	when the crop is cut.	
	Alfalfa weevil larvae					
	Beet armyworm					
	Cabbage looper (CA only)					
	Egyptian alfalfa weevil larvae					
	Granulate cutworm					
	Potato leafhopper* **	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	Lygus Bugs (Western U.S.)*					
	Western yellowstriped armyworm					

ALFALFA USE RESTRICTIONS

• DO NOT apply more than 11.3 fl oz/A (0.11 lb. ai/A ) of Sedaire EC or other indoxacarb-containing products per cutting.

• DO NOT apply more than 45 fl oz/A (0.44 lb ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• When Sedaire EC is used on alfalfa grown for seed, the seed may not be used for sprouts or livestock feed. All seed from treated crop must be tagged, "Not for Human or Animal Use" at the processing plant.

Allow a minimum of 7 days between applications.

Note: Apply lower listed rates for light to moderate infestations. Use intermediate to high rates within the listed rate range on heavier infestations or when later instar larvae exist. Use the highest listed rate for controlling severe infestations or when longer residual control is desired.

\*Suppression only.

\*\*Not Registered for Use in California

Crops	Insects	Lb Al	FlOz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
Bean (Dried and Succulent) (except Soybean)	Corn earworm	0.065 - 0.11	6.7 - 11.3	11.5 - 19	7	12 hrs.
Including: Dried cultivars of bean (Lupinus)	European corn borer					
(includes grain lupin, sweet lupin, white lupin, and						
white sweet lupin); bean (Phaseolus) (includes						
field bean, kidney bean, lima bean (dry), navy						
bean, pinto bean, tepary bean); bean (Vigna)						
(includes adzuki bean, blackeyed pea, catjang,						
cowpea, crowder pea, moth bean, mung bean,						
rice bean, Southern pea, urd bean); broad bean						
(dry); chickpea; guar; lablab bean, lentil						

BEAN (DRIED AND SUCCULENT) (EXCEPT SOYBEANS) USE RESTRICTIONS

• DO NOT apply more than 45 fl oz/A (0.44 lb ai/A) of Sedaire EC or other indoxacarb-containing products per crop.

• DO NOT apply more than 135 fl oz/A (1.32 lb ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• DO NOT make more than 4 applications of Sedaire EC per acre per crop.

· Allow a minimum of 7 days between applications.

Note: For ground applications, make a uniform application in approximately 20-100 gal/A of water.

Crops	Insects	Lb Al	FI Oz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
<b>Corn</b> (field) Corn (grown for seed) Corn (pop)	Beet armyworm Corn earworm* Corn rootworm (adult) European corn borer Fall armyworm Grasshoppers Japanese beetles (adult)** Western bean cutworm Yellowstriped armyworm	0.059 - 0.11	6.0 - 11.3	11.5 - 21.3	14 Days for Grain and Stover (field, pop, and corn grown for seed) 1 Day for Forage, Fodder, Silage (field and corn grown for seed only)	12 hrs.
	Brown stink bug** Green stink bug** Southern green stink bug**	0.09 - 0.11	9.2 - 11.3	11.5 - 14		

**CORN USE RESTRICTIONS** 

• DO NOT apply more than 22.6 fl oz/A (0.22 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• DO NOT make more than 2 applications of Sedaire EC per acre per crop.

· Allow a minimum of 5 days between applications.

\*Corn earworm control is only for treated foliage and silks. New foliage and new silks will not be protected with a single application.





Crops	Insects	Lb Al	Fl Oz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
Cotton	Cotton Bollworm* Tobacco Budworm*	0.11	11.3	11.5	14	12 hrs.
	Cotton Bollworm in Transgenic Bt Cotton	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	Beet Armyworm Fall Armyworm Western yellowstriped armyworm	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	Cabbage Looper Soybean Looper	0.065 - 0.09	6.7 - 9.2	14 - 19		
	Cotton Fleahopper** Lygus Bugs (Western U.S.)*** Tarnished Plant Buo**	0.09 - 0.11	9.2 - 11.3	11.5 - 14		

#### **COTTON USE RESTRICTIONS**

• DO NOT apply more than 45 fl oz/A (0.44 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• **DO NOT** make more than 4 applications of **Sedaire EC** per acre per crop.

• Allow a minimum of 5 days between applications.

Note: Beet armyworm and Western yellowstriped armyworm (AZ & CA only) - Sedaire EC may be applied to seedling cotton (less than 18 inches high), at rates of 6.7 - 11.3 fl oz/A in sufficient water to obtain thorough coverage (minimum of 5 gal/A).

\*Cotton Bollworm and Tobacco Budworm - For the most effective control, applications of Sedaire EC should be made when the majority of the population is within the time of blackhead egg stage to egg hatch.

AL & GA only - Sedaire EC may be applied at 0.09 lb ai/A (9.2 fl oz/A of product) for control of low populations of tobacco budworm and cotton bollworm on conventional cotton varieties that **DO NOT** contain the transgenic Bt trait. Low populations are defined as less than 30 eggs per 100 terminals and/or less than 10 tobacco budworm/cotton bollworm larvae detected per 100 terminals, blooms, or squares. If tobacco budworm or cotton bollworm populations exceed the egg or larval threshold as described above, then increase the Sedaire EC use rate to 0.11 lb ai/A (11.3 fl oz/ A of product).

\*\* Tarnished Plant Bug and Cotton Fleahopper - A single application of **Sedaire EC** will provide control of light to moderate populations of tarnished plant bug or cotton fleahopper. Heavy populations of tarnished plant bug or cotton fleahopper may require multiple applications. For the most effective control, fields should be scouted twice per week with application timing based on locally determined economic thresholds. Consult the cooperative extension service, professional consultants or other qualified authorities to determine appropriate threshold levels for treatment in your area.

\*\*\*Suppression only.

Crops	Insects	Lb Al	FIOz	Acres Treated per gal of Sedaire EC	Last Application (Days to Harvest)	REI
Peanut	Corn Earworm	0.065 - 0.11	6.7 - 11.3	11.5 - 19	14	12 hrs
	Beet armyworm	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	Fall armyworm					
	Granulate cutworm					
	Rednecked peanutworm*					
	Tobacco budworm					

#### PEANUT USE RESTRICTIONS

• DO NOT apply more than 45 fl oz/A (0.44 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• DO NOT make more than 4 applications of Sedaire EC per acre per crop.

Allow a minimum of 5 days between applications.

\*Not Registered for Use in California

Crops	Insects	Lb Al	FI Oz	Acres Treated per gal of Sedaire EC	Last Application (Days to Harvest)	REI
<b>Tuberous and Corm</b>	Cabbage Looper	0.045 - 0.11	4.6 - 11.3	11.5 - 27.8	7	12 hrs
Vegetables	Colorado potato beetle*	0.065 - 0.11	6.7 - 11.3	11.5 - 19		
Including: Arracacha,	European corn borer					
Arrowroot, Chinese	Potato tuberworm**	0.055 - 0.11	5.6 - 11.3	11.5 - 22.8		
Artichoke, Fdible Canna						
Bitter and Sweet Cassava,						
Chayote (root), Chufa,						
Dasheen, Ginger, Leren,						
Potato, Sweet Potato,						
Tanier, Tumeric, Yam Bean,						
and True Yam						
THEFE AND AND A ADDITION						

TUBEROUS AND CORM VEGETABLES USE RESTRICTIONS:

Make no more than 4 applications per acre per crop.

• DO NOT apply more than 45 fl oz/A 0.44 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per crop.

• DO NOT apply more than 135 fl oz/A (1.32 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• The minimum interval between sprays is 5 days.

\*Colorado potato beetle - In situations where Colorado potato beetle populations are known or suspected to be difficult to control with current insect control products, the inclusion of piperonyl butoxide (PBO), a synergist, with Sedaire EC may be necessary to achieve optimum control. In these situations, a combination of Sedaire EC applied at a rate of 6.7 – 11.3 fl oz/A combined with a product containing 0.5 lb. ai/A of the synergist piperonyl butoxide (PBO) may be necessary to achieve the most effective control of Colorado potato beetle larvae.

Apply the low rates on small plants, small insects and light infestations of insects. Use intermediate rates on large insects and heavier infestations of insects. Use the highest specified rate for controlling severe infestations. Apply Sedaire EC as a thorough coverage spray using properly calibrated air or ground spray equipment. Use sufficient water to obtain thorough and uniform coverage. For aerial application, use a minimum of 5 gal/A of water. \*\*Potato tuberworm foliar feeding larvae – Sedaire EC is most effective when applied by ground, air or overhead chemigation to vigorously growing plants through tuber bulking prior to the beginning of crop senescence. For control of potato tuberworm foliar feeding larvae, apply Sedaire EC when tuberworm larvae and/or moth counts reach locally established treatment threshold populations. Sedaire EC is absorbed into leaf tissue via translaminar movement and is most effective when applied to vigorously growing plants through tuber bulking (Growth Stage IV) prior to the beginning of crop senescence (Growth Stage V). Repeat applications of effective insecticides may be needed to keep tuberworm larvae populations as low as possible prior to harvest in order to reduce the risk of tuber damage. Failure to adequately control tuberworm larvae prior to crop senescence or vine kill increases the risk of tuber damage. To improve control of adults (moths), apply Sedaire EC in a tank mix with a pyrethroid insecticide.

Potato tuberworm is a difficult pest to control due to several factors; eggs can be laid deep in the canopy and on the underside of the leaf, and larvae feed inside the leaves prior to moving to the soil to feed on the tubers. An integrated spray approach is essential. Foliar sprays alone (ground or air) may not provide adequate control of larvae in the mid to lower crop canopy. For best results, apply via chemigation or integrate chemigation applications into the foliar spray program. Ensure thorough coverage by using sufficient spray volumes. For ground applications use at least 10 gal/A of water. For aerial applications, use at least 5 gal/A of water. For best results, apply in 0.1 to 0.2 inches of water per acre and add MSO at 12 to 16 fl oz/A. Do not make more than two sequential applications of **Sedaire EC** for control of potato tuberworm before rotating to another registered insecticide having a different mode of action.



Crops	Insects	Lb Al	Fl Oz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
Soybean***	Beet armyworm Cabbage looper* Corn earworm Fall armyworm Grasshoppers Green cloverworm Soybean looper* Yellowstriped armyworm	0.045 - 0.11	4.6 - 11.3	11.5 - 27.8	21	12 hrs.
	Velvetbean Caterpillar**	0.055 - 0.11	5.6 - 11.3	11.5 - 22.8		
	Tobacco budworm Bean leaf beetle <sup>**</sup> Brown stink bug <sup>**</sup> Green stink bug <sup>**</sup> Southern green stink bug <sup>**</sup>	0.09 - 0.11	9.2 - 11.3	11.5 - 14		

#### SOYBEAN USE RESTRICTIONS

• DO NOT apply more than 45 fl oz/A (0.44 lb. ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

• DO NOT make more than 4 applications of Sedaire EC per acre per crop.

· Allow a minimum of 5 days between applications.

• DO NOT feed or graze livestock on treated fields.

\*Use lower rate (4.6 fl oz/A) for low to moderate populations of cabbage and soybean loopers. Use higher rates (5.6 fl oz/A to 11.3 fl oz/A) for higher populations or when crop canopy is dense.

\*Suppression only.

\*\*Not Registered for Use in California

Crops	Insects	Lb Al	FI Oz	Acres Treated per Gal of Sedaire EC	Last Application (Days to Harvest)	REI
Tobacco	Tobacco budworm Tobacco hornworm Tomato hornworm Tobacco splitworm	0.065 - 0.11	6.7 - 11.3	11.5 - 19	14	12 hrs.
	Tobacco Flea Beetle <sup>1,*</sup>	0.09 - 011	9.2 - 11.3	11.5 - 14		

DO NOT apply more than 45 fl oz/A (0.44 lb ai/A) of Sedaire EC or other indoxacarb-containing products per calendar year.

**DO NOT** make more than 4 applications of **Sedaire EC** per acre per crop.

· Allow a minimum of 5 days between applications.

Note: Use intermediate to high rates within the listed rate range (9.2 to 11.3 fl oz/A) on heavier infestations or when later instar larvae are present.

Sedaire EC is recommended as a foliar application for control of tobacco flea beetle.

\*Not Registered for Use in California

# STORAGE AND DISPOSAL

# DO NOT contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Keep this product in its tightly closed original container, when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals, and avoid excessive heat while in storage. PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

# **CONTAINER HANDLING:**

For plastic containers < 5 gallons: Nonrefillable Container: DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

For plastic containers > 5 gallons: Nonrefillable container: DO NOT reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple Rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by other procedures allowed by state and local authorities.

# LIMITATION OF WARRANTY AND LIABILITY

IMPORTANT: READ BEFORE USE. Read the entire Directions for Use, Conditions of Warranties and Limitations of Liability before using this product. If these terms and conditions are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Disclaimer of Warranties and Limitations of Liability. CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, injury, and other unintended consequences may result because of such factors as manner of use or application (including misuse), the presence of other materials, weather conditions, and other unknown factors, all of which are beyond the control of ATTICUS, LLC. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: To the extent consistent with applicable law, ATTICUS, LLC makes no other warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. LIMITATIONS OF LIABILITY: To the extent consistent with applicable law, neither ATTICUS. LLC the manufacturer, nor the Seller shall be liable for any indirect, special, incidental or consequential damages resulting from the use, handling, application, storage, or disposal of this product. To the extent consistent with applicable law, the exclusive remedy of the user or buyer for any and all losses, injuries or damages resulting from the use, handling, application, or storage of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid.

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