



**DuPont™ Steward® EC**  
insecticide



# DuPont™ Steward® EC

## insecticide

GROUP	22	INSECTICIDE
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### Emulsifiable Concentrate

Contains 1.25 lbs. Active Ingredient per gallon.

Active Ingredient	By Weight
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Indoxacarb	
(S)-methyl 7-chloro-2,5-dihydro-2-[[methoxy-carbonyl][4(trifluoromethoxy)phenyl]amino]-carbonyl]indeno[1,2-e][1,3,4]oxadiazine-4a-(3H)-carboxylate	15.84%

<b>Inert Ingredients</b>	84.16%
<b>TOTAL</b>	100%

EPA Reg. No. 352-638      EPA Est. No. \_\_\_\_\_

### Nonrefillable Container

Net: \_\_\_\_\_

OR

### Refillable Container

Net: \_\_\_\_\_

## PRECAUTIONARY STATEMENTS

### KEEP OUT OF REACH OF CHILDREN

# CAUTION

### FIRST AID

**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. Do not give anything by mouth to an unconscious person.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-441-3637** for emergency medical treatment information.

## PRECAUTIONARY STATEMENTS (cont'd)

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**Caution!** Harmful if swallowed. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Harmful if inhaled. Avoid breathing (dust, vapor or spray mist). Remove contaminated clothing and wash clothing before reuse.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical resistant to this product are listed below. If you want more options follow the instructions for Category A on the EPA chemical resistance category selection chart.

#### Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber), all  $\geq 14$  mls.

Shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, 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 "applicator 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:** Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing and/or PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to mammals, birds, fish and aquatic invertebrates. Do not apply directly to water, 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 rinsewater. Do not apply where/when conditions could favor runoff. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

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 actively visiting the treatment area.

## DIRECTIONS FOR USE

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

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. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

DuPont™ STEWARD® 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

Chemical Resistant Gloves Category A (such as butyl rubber, natural rubber, neoprene rubber or nitrile rubber), all  $\geq$ 14 mls.

STEWARD® EC must be used only in accordance with the directions on this label or in separate DuPont supplemental labeling available through local dealers.

DuPont will not be responsible for losses or damages resulting from use of this product in any manner not specifically stated on this label or other labels or bulletins published by DuPont. User assumes all risks associated with such non-specified use.

STEWARD® EC is an emulsifiable concentrate that can be applied as a foliar spray to control many important insects. STEWARD® EC is diluted with water for application.

Do not formulate this product into any other End-use products without written permission of DuPont.

Do not use in greenhouses.

**CHEMIGATION:** Do not apply this product through any type of irrigation system except for application to alfalfa, cotton and peanuts and as allowed by Federal Supplemental and Special Local Need (SLN) labeling. (See "Application by Chemigation" section of this label.)

Always shake well before use.

### INTEGRATED PEST MANAGEMENT

DuPont 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 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 or other qualified authori-

ties to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

### BENEFICIAL ARTHROPODS

Other than reducing the target pest species as a food source, STEWARD® EC helps conserve certain beneficial arthropods, including parasitic wasps, predatory mites, big-eyed bugs, damsel bugs, minute pirate bugs, and spiders. While these beneficials 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.

### SCOUTING

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

### RESISTANCE MANAGEMENT

For resistance management, STEWARD® EC insecticide is a group 22 insecticide. Repeated and exclusive use of STEWARD® EC or other group 22 insecticides may lead to the buildup of resistant strains of insects in some crops.

Some insects are known to develop resistance to products used repeatedly for control. When this occurs, the recommended dosages fail to suppress the pest population below the economic threshold. Because the development of resistance cannot be predicted, the use of this product should conform to resistant management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternate method of control for your area. For additional information on insect resistance monitoring, visit the Insecticide resistance Action Committee (IRAC) on the web at <http://www.irac-online.org>.

### 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.

STEWARD® EC applications should target eggs and small instar larvae.

Follow-up treatments of STEWARD® EC should be applied, as needed, to keep pest populations within threshold limits. STEWARD® EC should be applied at 5 to 7 day intervals to maintain control.

Use sufficient water to obtain thorough, uniform coverage.

Because STEWARD® 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. STEWARD® EC may be applied by ground, aerial or overhead chemigation application equipment. For aerial application, use a minimum of 3 gals. water per acre (gpa) [minimum of 5 gals water per acre in

Arizona and California]. For ground application, use a minimum of 5 gals. 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 DuPont™ STEWARD® EC. Fill spray tank 1/4 to 1/2 full of water. Add STEWARD® 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.

**Compatibility** - Since formulations may be changed and new ones introduced, it is recommended that users premix a small quantity of a desired tank mix and observe for possible adverse changes (settling out, flocculation, etc.). Avoid mixtures of several materials and very concentrated spray mixtures.

This product can be mixed with pesticide products labeled for use on alfalfa, cotton, peanuts, and soybeans in accordance with the most restrictive of label limitations and precautions. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

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

1. Water soluble bags.
2. Water dispersible granules.
3. Wettable powders.
4. Water based suspension concentrates.
5. Water soluble concentrates.
6. Oil Based Suspension Concentrates.
7. STEWARD® EC and other emulsifiable concentrates.
8. Adjuvants, surfactants, oils.
9. Soluble fertilizers.
10. Drift retardants.

Follow local practice and manufacturer's recommendations.

## 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 waste rinse water in accordance with local regulations.

## CROP ROTATION RESTRICTIONS

Crops that are on this label and all brassica leafy vegetables, cucurbit vegetables, fruiting vegetables, leafy green vegetables, leafy petiole vegetables, pome fruit and stone fruit, plus sweet corn, cranberry, grape, mint, southern pea and the tuberous and corn vegetables found in crop subgroup 1C (arracacha, arrowroot, Chinese 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, manioic pea) and true yam) may be planted immediately following harvest. Do not plant for food or feed any other crops not registered for use with indoxacarb for 30 days after last use.

## APPLICATION BY CHEMIGATION – ALFALFA, COTTON AND PEANUT

### Instructions for the Use of STEWARD® 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 STEWARD® EC as high as possible in the application. Apply STEWARD® EC in 0.1 to 0.2 inches of water per acre. STEWARD® EC is most active as an ingestion insecticide, although it does have activity as a direct contact insecticide. For best results, applications of STEWARD® EC should ensure thorough coverage of the target plant to maximize the opportunity for target insects to ingest STEWARD® EC.

### Types of Chemigation Systems:

STEWARD® 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 STEWARD® EC through any other type of irrigation system. Do not use filter screens smaller than 50 mesh throughout the system, due to possible build up of material on 100 mesh or smaller screens.

### General Directions for Chemigation:

#### Preparation

A pesticide tank is recommended for the application of STEWARD® 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 STEWARD® 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 STEWARD® EC to water, never put STEWARD® 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 DuPont™ STEWARD® 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 STEWARD® EC into the irrigation water line 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 STEWARD® 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 STEWARD® EC must provide for uniform distribution of STEWARD® EC treated water. Non-uniform distribution can 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 STEWARD® 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 STEWARD® 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

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.
- It is recommended that nozzles in the immediate area of wells, control panels, chemical supply tanks and system safety devices be plugged 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.

Crops	Insects	DuPont™ STEWARD® EC Rate Per Acre		Acres Treated per Gal. of STEWARD® EC	Last Application Days to Harvest	REI
		Lbs. A.I.	Fluid Ounces			
Alfalfa, including alfalfa grown for seed	Cabbage looper (except CA)	0.045 - 0.11	4.6 - 11.3	11.5 - 27.8	7	12 hrs.
	Alfalfa caterpillar Alfalfa weevil larvae Beet armyworm Cabbage looper (CA only) Egyptian alfalfa weevil larvae Granulate cutworm	0.065 - 0.11	6.7 - 11.3	11.5 - 19		
	Potato leafhopper (except California) (suppression only) Western yellowstriped armyworm	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	Do not apply more than 45 fl.oz. STEWARD® EC (0.44 lb a.i.) per acre per crop season. Apply no more than 11.3 fluid ounces (0.11 lb ai) of STEWARD® EC per cutting. When STEWARD® 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. Apply lower rates on light to moderate infestations. Use intermediate to high rates on heavier infestations or when later instar larvae exist. Use the highest recommended rate for controlling severe infestations or when longer residual control is desired.					
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 Bug**	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	The minimum interval between treatments is 5 days. Do not apply more than 45 fl. oz. STEWARD® EC (0.44 lb. a.i.) per acre per crop. Beet armyworm and Western yellowstriped armyworm (AZ & CA only) - STEWARD® EC may be applied to seedling cotton (less than 18 inches high), at rates of 6.7 - 11.3 fluid ounces per acre in sufficient water to obtain thorough coverage (minimum of 5 gallons per acre). *Cotton Bollworm and Tobacco Budworm - For the most effective control, applications of STEWARD® EC should be made when the majority of the population is within the time of blackhead egg stage to egg hatch. AL & GA only - STEWARD® EC may be applied at 0.09 lbs active ingredient per acre (9.2 fl. oz product per acre) 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 STEWARD® EC use rate to 0.11 lbs active ingredient per acre (11.3 fl. oz product per acre). **Tarnish Plant Bug and Cotton Fleahopper - A single application of STEWARD® 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.					
Peanut	Corn Earworm	0.065 - 0.11	6.7 - 11.3	11.5 - 19	14	12 hrs.
	Beet armyworm Fall armyworm Granulate cutworm Rednecked peanutworm (except California)	0.09 - 0.11	9.2 - 11.3	11.5 - 14		
	The minimum interval between treatments is 5 days. Do not apply more than 45 fl. oz. STEWARD® EC (0.44 lb. a.i.) per acre per crop.					
Soybean (except California)	Beet armyworm Cabbage looper* Corn earworm Fall armyworm 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		
	The minimum interval between treatments is 5 days. Do not apply more than 45 fl. oz. STEWARD® EC (0.44 lb. a.i.) per acre per crop. NOTE: 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					

## SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

### IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets (>150 microns). The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. **APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS!** See **Wind, Temperature and Humidity**, and **Surface Temperature Inversions** sections of this label.

### Controlling Droplet Size - General Techniques

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. **WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.**
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

### Controlling Droplet Size - Aircraft

- **Number of Nozzles** - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is emitted backwards, parallel to the airstream will produce larger droplets than other orientations.
- **Nozzle Type** - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- **Do not apply as a ULV application.**

### BOOM LENGTH AND HEIGHT

- **Boom Length (aircraft)** - The boom length should not exceed 3/4 of the wing length, using shorter booms decreases drift potential. For helicopters use a boom length and position that prevents droplets from entering the rotor vortices.
- **Boom Height (aircraft)** - Application more than 10 ft above the canopy increases the potential for spray drift.

- **Boom Height (ground)** Setting the boom at the lowest height which provides uniform coverage reduces the exposure of droplets to evaporation and wind. The boom should remain level with the crop and have minimal bounce.

### WIND

Drift potential increases at wind speeds of less than 3 mph (due to variable direction and inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **AVOID APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.**

**Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they effect spray drift.

### TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

### SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a surface temperature inversion. Surface inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Surface inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified 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 a surface inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

### SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

### 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, 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.

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Do not subject to temperatures below 32 degrees F. Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not for use or storage in or around the home.

**PESTICIDE DISPOSAL:** Do not contaminate water, food, or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by 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:** Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

**Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 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, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Rigid Plastic and Metal Containers (Capacity Greater Than 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 1/4 full with water. Replace 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, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**Nonrefillable Rigid Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

**All Refillable Containers:** Refillable container.

**Refilling Container:** Refill this container with DuPont™ STEWARD® EC containing indoxacarb only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use container, contact DuPont at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact DuPont at the number below for instructions.

**Disposing of Container:** Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact DuPont at 1-800-441-3637, day or night.



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## **LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read this Limitation of Warranty and Liability Before Buying or Using This Product. If the Terms Are Not Acceptable, Return the Product at Once, Unopened, and the Purchase Price Will Be Refunded.

It is impossible to eliminate all risks associated with the use of this product. Such risks arise from weather conditions, soil factors, off target movement, unconventional farming techniques, presence of other materials, the manner of use or application, or other unknown factors, all of which are beyond the control of DuPont. These risks can cause: ineffectiveness of the product, crop injury, or injury to non-target crops or plants. **WHEN YOU BUY OR USE THIS PRODUCT, YOU AGREE TO ACCEPT THESE RISKS.**

DuPont warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for the purpose stated in the Directions for Use, subject to the inherent risks described above, when used in accordance with the Directions for Use under normal conditions.

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To the extent consistent with applicable law that allows such requirement, DuPont or its Ag Retailer must have prompt notice of any claim so that an immediate inspection of buyer's or user's growing crops can be made. Buyer and all users shall promptly notify DuPont or a DuPont Ag Retailer of any claims, whether based on contract, negligence, strict liability, other tort or otherwise, or be barred from any remedy.

This Limitation of Warranty and Liability may not be amended by any oral or written agreement.

**For product information call: 1-888-6-DUPONT**

**Internet address: <http://cropprotection.dupont.com/>**

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