

# **DISTANCE®**INSECT GROWTH REGULATOR

Active Ingredient
Pyriproxyfen (2-[1-methyl-2- (4-phenoxyphenoxy) ethoxy]pyridine)
11.23%
Other Ingredients
Total
100.00%

Contains 0.86 pound a.i. per gallon. Contains aromatic petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN** 

# **CAUTION**

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS

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EPA Bog. Bo. 59439-9

### PRECAUTIONARY STATEMENTS

#### **HAZARDS TO HUMANS & DOMESTIC ANIMALS**

# **CAUTION**

Causes skin and eye irritation. Do not get on skin, in eyes, or on clothing. Harmful if inhaled, swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### **FIRST AID**

lf on skin or

Take off contaminated clothing.

clothing:

Rinse skin immediately with plenty of water for 15 - 20 minutes.

Call a poison control center or doctor for further treatment advice.

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 swallowed:

Call 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 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 further 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 1-800-892-0099 for emergency medical treatment information.

#### **NOTE TO PHYSICIANS**

If ingested, probable mucosal damage may contraindicate the use of gastric lavage. This product contains a light hydrocarbon liquid; ingestion or subsequent vomiting can result in aspiration of this product, which can cause pneumonitis.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE):**

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

Applicators and other handlers must wear: coveralls over short-sleeved shirt and short pants or long-sleeved shirt and long pants, chemical-resistant gloves, such as Barrier Laminate or viton ≥ 14 mils, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure, chemical-resistant apron when cleaning equipment, mixing, or loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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 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. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters or rinsate.

#### DIRECTIONS FOR USE

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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**

Use this product 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.

PPE required 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, is: coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as barrier laminate or viton ≥ 14 mils, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure,

#### DISCLAIMER, RISKS OF USING THIS PRODUCT, LIMITED WARRANTY AND LIMITATION OF LIABILITY

IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

#### RISKS OF USING THIS PRODUCT

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent a combination of such factors and the factors beyond the combined which the buyer should be aware the factors beyond the combined with the such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label and subject to the Risks of Using This Product as described above. EXCEPT AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, ETTHER EXPRESSED OR IMPLIED. No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

#### LIMITATION OF LIABILITY

In no event shall Valent or Selier be liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or aftered finance ratings, emotional or mental distress and/or exemplary damages. THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

#### PROMPT NOTICE OF CLAIM

Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

If Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

#### NO AMENDMENTS

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability, which may not be modified by any oral or written agreement.

#### **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

### **GENERAL INFORMATION**

For control of insects including whiteflies, scales, shore flies and fungus gnats in indoor (greenhouse, lath and shadehouse, and interiorscapes) and outdoor ornamentals, including flowering and foliage crops, ground covers, shrubs and ornamental trees, and in non-bearing fruit and nut trees.

DISTANCE affects all pest insect life stages, including eggs, nymphs/larvae, pupae and adults. DISTANCE does not control adults, but greatly reduces their production of viable eggs due to its strong transovarial activity. In whitefly, transovarial activity begins within one day after adults contact or ingest DISTANCE residues. DISTANCE is also ovicidal and inhibits metamorphosis of nymphs, larvae and pupae into adults. Since DISTANCE is an Insect Growth Regulator (IGR), activity depends on the insect's development. Therefore, evidence of activity may be slower than with typical contact insecticides, especially when large numbers of late instars are present at time of application.

DISTANCE also has strong translaminar activity on a variety of ornamental plants, including poinsettia, hibiscus, gerbera daisy and chrysanthemums. Distance residues applied to the upper leaf surface will rapidly penetrate the leaf cuticle, and can subsequently be ingested by immature and adult insects feeding on the lower leaf surface (eg. whitefly). Therefore, even in cases where it is difficult to achieve thorough underleaf spray coverage, DISTANCE can still provide highly effective control.

DISTANCE is intended for use in Integrated Pest Management (IPM) or Integrated Resistance Management (IRM) programs. DISTANCE will not control adult insects, and it is recommended to be used in combination and/or rotation with other IPM or IRM materials. Contact your local state extension service for details.

#### **MANAGING INSECT RESISTANCE**

Repeated use of the same class of insecticides, or insecticides with similar modes of action can lead to the buildup of resistant insect strains. Whiteflies are especially prone to becoming resistant to insecticides. To optimize resistance management practices, Valent USA Corporation is restricting DiSTANCE Insect Growth Regulator applications to no more than two times per cropping cycle or no more than two times per six months. In addition, DISTANCE should be used in alternation with other IGR materials possessing dissimilar modes of action and/or with other chemical classes of insecticides. Follow local, state, and federal IPM and Integrated Resistance Management (IRM) recommendations.

#### **PLANT TOLERANCE**

IMPORTANT: The large number of existing ornamental varieties and cultivars coupled with the constant introduction of new varieties makes it impossible to field test DISTANCE in every locale where sold or in all of the combinations created by these differences. These differences include the soil or media type, pH, moisture or fertility, environmental conditions such as temperature, lighting or degree-days and horticultural practice and the manner of use and application of this product.

To ensure that DISTANCE is compatible with the variety or cultivar under your specific conditions, test the product on a limited scale and observe for phytotoxicity for two weeks before making large scale applications. Phytotoxicity has been observed on the following plants: Salvia (Salvia spp.), Ghost Plant (Graptopetalum paraguayense), Boston Fern (Nephrolepis exaltata), Schefflera (Schefflera spp.), Gardenia (Gardenia spp.) and Coral Bells (Heuchera sanguinea). It is therefore recommended that DISTANCE not be used on these plants. Do not apply to Poinsettia after bract formation.

#### MIXING INSTRUCTIONS

Prepare no more spray mixture than is necessary for the immediate operation. Thoroughly clean spray equipment before using this product. Agitate thoroughly before and during application. Flush spray tank thoroughly with clean water daily after use and dispose of pesticide rinsate by application to a previously treated area. Add ½ to 2/3 of the required amount of water to the spray or mix tank. With the agitator running, add the required amount of DISTANCE. Continue agitation while adding the remainder of the water. Begin application of the spray solution after DISTANCE has been added and completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

#### **CONVERSION CHART**

Gallons of Mixture*											
Rate/100 Gallons		Rate/50 Gallons		Rate/25 Gallons		Rate/10 Gallons		Rate/5 Gallons			
OZ.	mi.	OZ.	ml,	OZ.	ml.	OZ.	ml.	oz.	ml.		
3	89	1.5	44	0.75	22	0.3	8.9	0.15	4.4		
4	118	2	59	1.0	30	0.4	11,8	0.2	5.9		
5	148	2.5	74	1.25	37	0.5	14.8	0.25	7.4		
6	177	3	89	1.5	44	0.6	17.7	0.3	8.9		
8	237	4	118	2.0	59	0.8	23,7	0.4	11.8		
10	298	5	148	2.5	74	1.0	30.0	0.5	14.8		
12	355	6	177	3.0	89	1.2	35.5	0.6	17.7		

<sup>\*</sup> Determine the rate per 100 gallons from Table 1. Follow the proper rate across the row to determine how much to add for mixtures less than 100 gallons.

#### COMPATIBILITY

DISTANCE is compatible with most commonly used insecticides, fungicides, and spray adjuvants used in the production of ornamental plants. When using DISTANCE in tank mixes with other pesticides, observe all directions for use and precautions on the respective tank mix label. When making an application of a tank mix for the first time, it is recommended that a few plants be treated and observed for phytotoxicity for two to four weeks before making large scale applications.

#### LOW VOLUME SYSTEMS

DISTANCE has been evaluated and shown to be effective for foliar applications when applied through Electrostatic Spraying Systems, PulsFog® Systems, or other low volume systems. To calculate the amount of product to be applied, use the appropriate amount of DISTANCE for the square footage to be treated with spray as listed. The amount of carrier (water) is dependent on the amount needed for adequate coverage. Low volume systems should not used to control soil-inhabiting insects such as fungus gnats and shore flies.

#### APPLICATION INSTRUCTIONS FOR USE IN IRRIGATION SYSTEMS

**Important:** First time users of DISTANCE through irrigation systems should make an application to a small area with only a few plants present to ensure that the irrigation system is delivering a uniform, even application across the application area.

Chemigation: Do not apply DISTANCE through any type of irrigation system when applying for control of foliar insects. DISTANCE may be applied through overhead irrigation at rates recommended in this label to provide proper coverage of all surfaces when treating for fungus gnats and shore flies. Overhead irrigation systems include overhead sprinklers such as impact or micro-sprinklers, mist-type irrigation such as fog systems, and hand-held calibrated irrigation equipment such as a hand-held wand with injector. Do not apply this product through any other type of irrigation system. Plant injury or lack of effectiveness, or illegal pesticide residues in a crop, can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide applications to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down to make necessary adjustments should the need arise.

#### Operation Instructions:

- 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.
- 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.
- 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.

- Do not apply when wind speed favors drift beyond the area intended for treatment. Avoid spray overlap, as injury may result.
- 8. Preparé a minimum mixture of 1 gallon of water with the desired rate of DISTANCE and inject this mixture into the system. Injecting a larger volume of a more dilute mixture will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep DISTANCE in suspension.
- Meter into irrigation water during the beginning of the irrigation cycle. It is important to continue running
  the system after the DISTANCE application is finished to remove all the product from the foliage and get it
  into the areas where the immature insect stages are located.

#### Systems Connected to Public Water Systems:

- Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days of the year.
- 2. 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 systems 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.
- 3. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
- 4. 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.
- 5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.
- 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.

Directions for Use on Shrubs, Omamentals, Flowering Plants, Foliage Plants, Ground Covers, Ornamental Trees, Non-Bearing Fruit, Nut Trees and Vines

PESTS	DOSAGE	APPLICATION METHOD	SPECIAL INSTRUCTIONS		
Silverleaf Whitefly Sweetpotato Whitefly Greenhouse Whitefly Aphids (suppression) Mealybugs (suppression)	6 to 8 fl. oz./ 100 gals.	Foliar Spray 100 gals. of spray mix will treat 20,000 sq. ft. of area.	Apply the spray mixture uniformly to all plant surfaces and to the point of runoff.  Make first application when adult insects begin to appear. If necessary, make a second application from 14 to 28 days after the first application. If an additional application is needed less than 14 days after the first treatment, use an IGR (Insect Growth Regulator) with another mode of action or another chemical class of insecticide. Use lower rate and longer interval for newly established infestations and when plants are not rapidly flushing new growth. Use higher rates and shorter interval for established infestations and/or when plants are rapidly flushing new growth. Apply no more than two times per cropping cycle or no more than two times per six months. If rapid control of adult insects is required, apply a labeled adulticide.		
Fungus Gnats Shore Flies	3 to 6 fl. oz./ 100 gals.	Sprench 100 gals. of spray mix will treat 3,333 to 5,000 sq. ft. of area.	For the control of fungus gnats and shore flies apply to potting media as a heavy, coarse spray (sprench) or higher volume drench application through conventional equipment to all insect infested surfaces or where insects may breed. Complete coverage of infested areas is essential for control. For optimal control, treat breeding areas under benches at the same time that the crop is treated. The soil surface should be moist at the time of application.		
		Drench Saturate only the top 1 to 1.5" of soil.	Broadcast application to Soil Surface; For bed, bench and container grown plants, apply DISTANCE as a coarse spray or 'sprench' to the soil surface. Mix 3 to 6 fl. oz. of DISTANCE in 100 gallons of water and apply to the soil surface at a volume of 2 to 3 gallons of final spray solution per 100 sq. ft. of area.		
			Drench application to soil surface of individual Containers: Mix 3 fl. oz. of DISTANCE in 100 gallons of water and evenly apply to surface of potting media to insure uniform treatment. Apply 2 fl. oz. of finished solution per 6-inch pot. Adjust volume accordingly for smaller or larger pots. Do not saturate potting media with drench solution, only the top 1 to 1.5" of soil needs to be drenched in order to achieve effective control.		
Black Scale California Red Scale Euonymus Scale Florida Wax Scale San Jose Scale Snow Scale Spotted Tentiform Leafminer		Foliar Spray 100 gals. of spray mix will treat 20,000 sq. ft. of area.	Apply the spray mixture uniformly to all plant surfaces and to the point of runoff.  Target crawler stage when treating infestations of scale.		

NOTE: Since omamental varieties are numerous, constantly changing, and may react differently to DISTANCE and tank mixtures including Distance, test the product(s) on a small scale before making large-scale applications. Phytotoxicity has been observed on the following plants: Salvia (Salvia spp.), Ghost Plant (Graptopetalum paraguayense), Boston Fern (Nephrolepis exaltata), Schefflera (Schefflera spp.), Gardenia (Gardenia spp.) and Coral Bells (Heuchera sanguinea). It is therefore recommended that DISTANCE not be used on these plants. DO NOT APPLY TO POINSETTIA AFTER BRACT FORMATION.

## STORAGE AND DISPOSAL

#### **PROHIBITIONS**

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

#### **STORAGE**

Store in a cool dry place.

Keep pesticide in original container.

Keep container closed when not in use.

Do not put concentrate or dilute into food or drink containers.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

#### **PESTICIDE DISPOSAL**

Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER DISPOSAL**

Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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TAME® - Reg. TM of Valent U.S.A. Corporation

Manufactured for: Valent U.S.A. Corporation P.O. Box 8025 Walnut Creek, CA 94596-8025

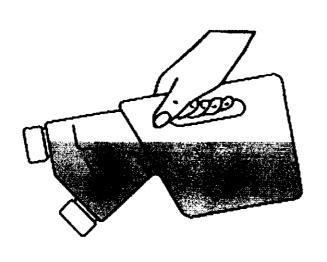
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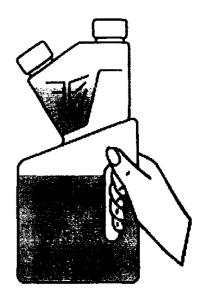
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EPA Reg. No. 59639-96 EPA Est. 66196-CA-01; 39578-TX-01

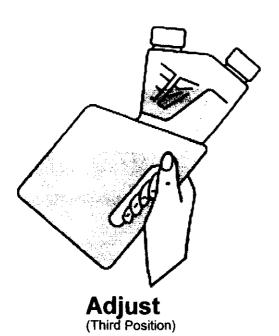
# DISTANCE INSECT GROWTH REGULATOR EPA REG. NO. 59639-96

# GRAPHIC DIAGRAMS FOR USE WITH TIP AND POUR PACKAGING ONLY

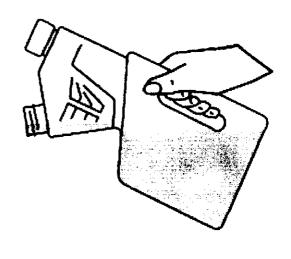




Measure (First Position)



Check (Second Position)



Pour (Fourth Position)