



# Distance<sup>®</sup>

## INSECT GROWTH REGULATOR

Active Ingredient	By Wt.
* Pyriproxyfen .....	11.23%
Other Ingredients .....	88.77%
Total .....	100.00%

Contains 0.86 pound ai per gallon.

Contains aromatic petroleum distillates.

\* (2-[1-methyl-2-(4-phenoxyphenoxy) ethoxy]pyridine)

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS

### 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

<b>If on skin or clothing:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>If in eyes:</b>	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.
<b>If swallowed:</b>	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give <b>any</b> liquid to the person. Do not give anything by mouth to an unconscious person.
<b>If inhaled:</b>	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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#### FIRST AID (Continued)

##### 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  $\geq$  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  $\geq$  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 unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop 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.

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#### LIMITED WARRANTY

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, EITHER 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 Seller 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 altered 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 THIS 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.

#### CHEMIGATION

Refer to supplemental labeling entitled "Application of *Distance* Insect Growth Regulator by Chemigation" for chemigation use directions. Do not apply this product through any irrigation system unless the supplemental labeling on chemigation is followed.

**California:** Do not apply this product through any type of irrigation system.

#### GENERAL INFORMATION

For control of insects including whiteflies, scale, 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 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 (e.g., 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. *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 1/2 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

#### CONVERSION CHART

Gallons of Mixture*									
Rate / 100 Gallons		Rate / 50 Gallons		Rate / 25 Gallons		Rate / 10 Gallons		Rate / 5 Gallons	
oz.	ml	oz.	ml	oz.	ml	oz.	ml	oz.	ml
2	59	1	30	0.5	15	0.2	5.9	0.1	3.0
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	296	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

\* 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 be used to control soil-inhabiting insects such as fungus gnats and shore flies.

**Table 1. Directions for Use on Shrubs, Ornamentals, Flowering Plants, Foliage Plants, Ground Covers, Ornamental Trees, Non-Bearing Fruit, Nut Trees and Vines**

PESTS	DOSAGE	APPLICATION METHOD	SPECIAL INSTRUCTIONS
Aphids (suppression) Greenhouse Whitefly Silverleaf Whitefly Sweetpotato Whitefly	6 to 8 fl. oz./ 100 gals.	<b>Foliar Spray</b> 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.
Black Scale California Red Scale Euonymus Scale Florida Wax Scale Mealybugs (suppression) San Jose Scale Snow Scale Spotted Tentiform Leafminer	8 to 12 fl. oz./ 100 gals.	<b>Foliar Spray</b> 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.
<p><b>NOTE:</b> Since ornamental varieties are numerous, constantly changing, and may react differently to <i>Distance</i> and tank mixtures including <i>Distance</i>, test the product(s) on a small scale before making large-scale applications.</p> <p>Phytotoxicity has been observed on the following plants: Salvia (<i>Salvia</i> spp.), Ghost Plant (<i>Graptopetalum paraguayense</i>), Boston Fern (<i>Nephrolepis exaltata</i>), Schefflera (<i>Schefflera</i> spp.), Gardenia (<i>Gardenia</i> spp.) and Coral Bells (<i>Heuchera sanguinea</i>). It is therefore recommended that <i>Distance</i> not be used on these plants. DO NOT APPLY TO POINSETTIA AFTER BRACT FORMATION.</p>			

**Table 2. Directions for Use on Shrubs, Ornamentals, Flowering Plants, Foliage Plants, Ground Covers, Ornamental Trees, Non-Bearing Fruit, Nut Trees and Vines**

PESTS	DOSAGE	APPLICATION METHOD	SPECIAL INSTRUCTIONS
Fungus Gnats Shore Flies	3 to 6 fl. oz./ 100 gals.	<b>Sprench</b> 100 gals. of spray mix will treat 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) 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.  <b>Broadcast Application to Soil Surface:</b> For bed, bench and container grown plants, apply <i>Distance</i> as a coarse spray or sprench to the soil surface. Mix 3 to 6 fl. oz. of <i>Distance</i> in 100 gals. of water and apply to the soil surface at a volume of 2 to 3 gals. of final spray solution per 100 sq. ft. of area. If a second application of <i>Distance</i> is needed, allow a minimum of 21 days between applications.
	2 fl. oz./ 100 gals.	<b>Drench</b> Saturate only the top 1" to 1.5" of soil.	<b>Important:</b> For drench applications to Poinsettia, see special use instructions below.  For the control of fungus gnats and shore flies apply to potting method as a drench application through conventional equipment. For optimal control, apply additional amounts of spray solution to breeding areas under benches at the same time that the crop is treated. The soil surface should be moist at the time of application.  <b>Drench Application to Soil Surface of Individual Containers:</b> Mix 2 fl. oz. of <i>Distance</i> in 100 gals. of water and evenly apply to surface of potting media to ensure uniform treatment. Apply 3 fl. oz. of finished solution per 6 inch pot. Adjust volume accordingly for smaller or larger pots (see drench mixing chart below). <b>Do not saturate potting media with drench solution</b> , only the top 1" to 1.5" of soil needs to be drenched in order to achieve effective control. Do not drench plants more than one time per crop cycle.

(Continued)

**Table 2. (Continued) Directions for Use on Shrubs, Ornamentals, Flowering Plants, Foliage Plants, Ground Covers, Ornamental Trees, Non-Bearing Fruit, Nut Trees and Vines**

PESTS	DOSAGE	APPLICATION METHOD	SPECIAL INSTRUCTIONS		
Fungus Gnats Shore Flies, Continued	2 fl. oz./ 100 gals.	<b>Drench</b> Saturate only the top 1" to 1.5" of soil	<b>Pot Diameter (inches)</b>	<b>Drench Volume (fl. oz./pot)</b>	<b>Rate/100 Gals. (fl. oz.)</b>
			4	1	2
			5	2	2
			6	3	2
			8	5	2
			10	7	2
			12	10	2

**NOTE:** Since ornamental 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.

**Drench Application to Individual Pots of Poinsettia:** In a few instances, malformation of roots and newly expanded leaves (i.e., cupping) has been observed on certain Poinsettia varieties (i.e. Freedom Bright, Freedom Bright Red, Winter Rose and Jingle Bells) following drench application of *Distance*. Leaf malformation was more commonly observed on plants exposed to high air temperatures, and on plants whose soil media was allowed to dry out following application, such as those along walkways or near doorways. Malformation of affected leaves was permanent, but new growth was unaffected after plants were hydrated. Malformed leaves were generally not evident at time of shipment. To minimize the risk of leaf malformation when drenching Poinsettia with *Distance*:

- Do not saturate the potting media with *Distance* drench solution. Apply only enough solution to saturate the top 1" - 1.5" of media (e.g., no more than 3 oz. solution per 6" pot). Do not mix more than 2 oz. of *Distance* per 100 gal. of water.
- Ensure that soil media remains uniformly moist and avoid exposing plants to high temperatures during and following drench application of *Distance*. If leaf malformation is noted, thoroughly water affected plants and, if necessary, move these plants to an area of the greenhouse with higher humidity.
- Do not drench individual Poinsettia with *Distance* more than one time per crop cycle.
- **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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PulsFog® - Reg. TM of Dramm Corporation

Manufactured for

**Valent U.S.A. Corporation**

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Form 20020228.distigr04r

Made in U.S.A.

EPA Reg. No. 59639-96

EPA Est. 66196-CA-01<sup>(F)</sup>, 39578-TX-01<sup>(E)</sup>

Information contained in this booklet is accurate at the time of printing. Since product testing is a continuous process, please read and follow the directions on the product label for the most current directions and precautionary statements.

Always check with your state to verify state registration status.

**Please verify registration status  
for use in California and New York.**

**For state registration and/or supplemental labels, please call or visit us online.  
You may also find them at [www.greenbook.net](http://www.greenbook.net) (C&P Press) and [www.cdms.net](http://www.cdms.net).**

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For more information:  
1-800-89-VALENT (898-2536)  
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