**IMIDACLOPRID**

**Garant™ T&O 2F Insecticide**

For foliar and systemic insect control in turfgrass (including sod farms), landscape ornamentals, fruit and nut trees and interior plantscapes.

**ACTIVE INGREDIENT:**
*Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine ................................. 21.4%*

**OTHER INGREDIENTS:** ............................................................... 78.6%

**TOTAL:** ........................................................... 100.0%

*Protected by U.S. Patent No. 4,742,060
Contains 2 pounds of imidacloprid per gallon.

**SHAKE WELL BEFORE USING**

**STOP – Read the label before use**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT,**

**CALL TOLL FREE, DAY OR NIGHT, 1-866-303-6950**

Read the entire label before using this product.

Use only according to label instructions.

Read "DISCLAIMER" before buying or using. If terms are not acceptable, return product unopened without delay.

**SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND USE DIRECTIONS**

**EPA Reg. No.: 432-1312-67760**

Distributed by:
Cheminova, Inc.
1700 Route 23
Wayne, NJ 07470
www.cheminova-usa.com

**GARANT is a trademark of Cheminova.**

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**This is a specimen label, intended for use only as a guide in providing general information regarding use of this product. As labels are subject to revision, always carefully read and follow the label on the product container.**

**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 a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

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

**IF IN EYES:**
- Hold eye open and rinse slowly and gently with water for 15 to 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.

Have a product container or label with you when calling a poison control center or doctor, or going for treatment. In case of emergency call toll free 1-866-303-6950.

**Note To Physicians:** No specific antidote is available. Treat the patient symptomatically.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Keep children or pets off treated area until spray is dry.

**Personal Protective Equipment (PPE)**

**WPS USES:** Applicators and other handlers who handle this product for any use covered by the Worker Protection Standard (40 CFR part 170) - in general, agricultural plant uses are e.g., use in and farms, must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton. If you want more options, follow instructions for category A on an EPA chemical-resistance category selection chart.
- Shoes plus socks

**Non-WPS USES:** Applicators and other handlers who handle this product for any use not covered by the Worker Protection Standard (40 CFR part 170) - in general, agricultural plant uses are covered by the WPS, must wear:
- Shirt and pants
- Gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. PPE. If no such instructions for washables, use detergents and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed oaths, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240[5][6]), the handler PPE requirements may be reduced or modified as specified in the WPS.

**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 product is highly toxic to 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 washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not formulate this product into other end-use products.
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

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 or agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on the label and the personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to use 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 (REl) of 12 hours. Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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.
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, neoprene rubber, natural rubber, polyethylene, polychloroprene (PVC) or viton.
- Shoes plus socks.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

- Keep children and pets off treated area until dry.

APPLICATION TO TURFGRASS

GARANT T&O 2F Insecticide can be used for the control of soil inhabiting pests of turfgrass, such as Northern & Southern masked chafers, Cyclocephala borealis, C. imicau, and C. luride. Asiatic garden beetles, Melolontha inaequivalvis; European chafers, Rhizotrogus magnili; Green June Beetles, Melolontha nana, or alts; May beetles, Phyllophaga spp.; Japanese beetles, Popillia japonica; Oriental beetle, Anomala orientalis; Biljbug, Sphenophorus spp.; Annual bluegrass weevil, Hyperoderus spp.; Black turfgrass stunts, Attemia spinulosa and Aphodius spp. Euro- pean Crane Fly Tropinota hirta, and mole crickets, Scaposthrius spp. GARANT T&O 2F Insec- ticide can also be used for suppression of cutworms and chinch bugs. GARANT T&O 2F Insecticide can be used as directed on turfgrass in sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod lawns.

The active ingredient in GARANT T&O 2F Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rain to move the active ingredient through the thatch.

Applications should not be made when turfgrass areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated turf area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Applications cannot exceed a total of 1.6 lbs of (0.4 lb of active ingredient) per acre per year.

APPLICATION EQUIPMENT FOR USE ON TURFGRASS

Apply GARANT T&O 2F Insecticide in sufficient water to provide adequate distribution in the treated area. The use of accurately calibrated equipment normally used for the application of turfgrass insecticides is required. Use equipment which will produce a uniform, coarse droplet spray, using a low pressure setting to eliminate off target drift. Check calibration periodically to ensure that equipment is working properly.

APPLICATION TO ORNAMENTALS

GARANT T&O 2F Insecticide is for use on ornamentals in commercial and residential land- scapes and interior plantscapes. GARANT T&O 2F Insecticide is a systemic product and will be translocated upward into the plant system from root uptake. To assure effective activi- ty, the product must be placed where the growing portion of the target plant can absorb the active ingredient. The addition of a nitrogen containing fertilizer, where applicable, into the solu- tion may enhance the uptake of the active ingredient. Application can be made by foliar application or soil applications; including soil injection, drenches, and broadcast sprays. Foliar applica- tions offer locally systemic activity against insect pests.

When making soil applications to plants with woody stems, systemic activity will be delayed until the active ingredient is translocated throughout the plant. In some cases, this transloca- tion delay could take 60 days or longer. For this reason, applications should be made prior to anticipated pest infestations to achieve optimum levels of control.

For outdoor ornamentals, broadcast applications cannot exceed a total of 1.6 lbs (0.4 lb of active ingredient) per acre per year.

Ant Management Programs

Use GARANT T&O 2F Insecticide to control aphids, scale insects, mealybugs and other sucking pests on ornamentals that the honeydew available as a food source for ant populations. GARANT T&O 2F Insecticide applications can then be supplemented with residual sprays, bait placements or other ant control tactics to further reduce the pest population.

NOTE: Not for use in commercial greenhouses, nurseries, or on grasses grown for seed, or on commercial fruit and nut trees.

APPLICATION EQUIPMENT FOR FOLIAR APPLICATIONS

GARANT T&O 2F Insecticide mixes readily with water and may be used in many types of applica- tion equipment. Mix product with the required amount of water and apply as desired depend- ent upon the selected use pattern.

When making foliar applications on hard to wet foliage such as holly, pine, or box, the addition of a spreader sticker is recommended. If concentrate or mist type spray equipment is used, an equivalent amount of product should be used on the area sprayed, as would be used in a dilute application.

GARANT T&O 2F Insecticide has been found to be compatible with commonly used fungicides, herbicides, liquid fertilizers, and other commonly used insecticides. Check physical compatibility using the correct proportion of products in a small jar to test if local experience is unavailable.

Do not apply through any irrigation system.

<table>
<thead>
<tr>
<th>RECOMMENDED APPLICATIONS</th>
<th>CROP</th>
<th>PEST</th>
<th>DOSAGE GARANT T&amp;O 2F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turfgrasses</td>
<td>Larvae of:</td>
<td>Annual bluegrass weed, Asiatic garden beetles, Billbug, Black turfgrass stunts, Cutworm (suppression), European crane fly, Southern masked chafers, Oriental beetles,</td>
<td>1.25 to 1.6 pt/A or 0.46 to 0.6 fl. oz. (14 to 17 ml) per 1000 sq. ft.</td>
</tr>
<tr>
<td>For suppression of cutworms and chinch bugs. GARANT T&amp;O 2F Insecticide can be used as directed on turfgrass in sites such as home lawns, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, athletic fields and sod lawns.</td>
<td></td>
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<tr>
<td>Chinch bugs (suppression)</td>
<td>Mole crickets</td>
<td>1.5 pt/A or 0.6 fl. oz. (17 ml) per 1000 sq. ft.</td>
<td></td>
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</tbody>
</table>

Note: For optimum control, irrigation or rainfall should occur within 24 hours after application to move the active ingredient through the thatch. Do not apply more than 1.6 pt (0.4 lb of active ingredient) per acre per year. Avoid moving turf or lawn area until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected.

For use only in and around industrial and commercial buildings and residential areas.

<table>
<thead>
<tr>
<th>RECOMMENDED APPLICATIONS</th>
<th>CROP</th>
<th>PEST</th>
<th>DOSAGE GARANT T&amp;O 2F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tesea, Shrubs, Evergreens, Flowers, Foilage plants, Groundcovers, Interior plantscapes</td>
<td>Adeleids, Aphids, Japanese beetles, Loose bugs, Leaf beetles (including elm and vitis), Leaf beetles, Chafers, Leafhoppers (including glassy-winged sharpshooter)</td>
<td>1.5 fl. oz. (45 ml) per 100 gallons of water</td>
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<tr>
<td>For foliar applications: Start treatments prior to establishment of high pest populations and reapply on an as needed basis.</td>
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<tr>
<td>Lakes, ponds, and ponds</td>
<td>White grub larva (such as Japanese beetle larvae, Chafers, Asiatic garden beetles, Oriental beetle)</td>
<td>0.46 to 0.6 fl. oz. (14 to 17 ml) per 1000 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Broadleaf Applications: Mix required amount of product in sufficient water to uniformly and accurately cover the area being treated. Do not use less than 2 gallons of water per 1000 sq. ft. For optimum control, irrigate thoroughly to incorporate GARANT T&amp;O 2F Insecticide into the upper soil. Refer to use directions specific for FLOWERS and GROUNDCOVERS concerning additional use instructions.</td>
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</tr>
</tbody>
</table>
RECOMMENDED APPLICATIONS

Trees, Shrubs, Flowers and Groundcovers
For use only in and around industrial and commercial buildings and residential areas, and state, national, and private wooded and forested areas for the insect pests listed below:

<table>
<thead>
<tr>
<th>Insect Pests</th>
<th>Plants Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphids</td>
<td>Leaf beetles</td>
</tr>
<tr>
<td>Amorphids</td>
<td>Lace bugs</td>
</tr>
<tr>
<td>Armored scales</td>
<td>Leaf beetles (including elm, ash, maple, and viburnum leaf beetle)</td>
</tr>
<tr>
<td>Leaf rollers</td>
<td>Leaf rollers (including Thrips suppression)</td>
</tr>
<tr>
<td>Black vine weevil larva</td>
<td>Leaf rollers</td>
</tr>
<tr>
<td>Emerald ash borer</td>
<td>Glassy-winged beetle</td>
</tr>
<tr>
<td>Eucalyptus longicornis borer</td>
<td>Sheepshank</td>
</tr>
<tr>
<td>Flea beetles</td>
<td>Larva</td>
</tr>
<tr>
<td>Flaxhead borer</td>
<td>Flaxhead borer (including brown borer, and other borer)</td>
</tr>
<tr>
<td>Pine tip moth larva</td>
<td>Pine tip moth larva</td>
</tr>
</tbody>
</table>

**Soil Injection - Grid System:**
Holes should be spaced on 2.5 feet centers, in a grid pattern, according to the root zone of the tree. **CIRCLE SYSTEM:** Apply in holes evenly spaced in circles, at least one hole per 100 feet of tree circumference (not more than one hole per 100 feet). The tree should be watered before and after injection. **BASAL SYSTEM:** Space injection holes evenly around the base of the tree, no more than 8 to 12 inches from the base.

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. For optimum control, keep the treated area moist for 7 to 10 days. Do not use less than 4 holes per tree.

No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York

Apply the soil injection dosage in no less than 10 gallons of water per 100 square feet as a drench around the base of the tree, directed to the root zone. Move plastic or any barrier that will stop solution from reaching the root zone.

For Control of Spotted Lanternfly: Applications to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

Shrubs 0.1 to 0.2 fl. oz. (3 to 6 mL) per inch of shrub height

For individual plants rating dosage localized.

Mix required dosage in sufficient water to inject an equal amount of solution in each hole. Maintain a low pressure and use sufficient solution for distribution of the liquid into the treatment zone. Apply the treated area moist for 7 to 10 days. Do not use less than 4 holes per shrub.

No Soil Injection Applications Allowed in Nassau or Suffolk Counties of New York

Apply the soil injection dosage in no less than 10 gallons of water per 100 square feet as a drench around the base of the tree, directed to the root zone. Remove plastic or any barrier that will stop solution from reaching the root zone.

**Flowers and Groundcovers:**
Apply as a broadcast treatment and incorporate into the soil before planting or apply after plants are established. If application is to established plants, optimum control will be achieved if area is irrigated thoroughly after application.

**STORAGE AND DISPOSAL**
Do not contaminate water, food, or feed by storage or disposal. Read the Entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

**IMPORTANT: READ BEFORE USE**
Read the Entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product. If terms are not acceptable, return the unopened product container to your supplier. By using this product, user or buyer accepts the following warranty disclaimer, inherent risks of use and limitation of remedies.

**WARRANTY DISCLAIMER**
Cheminova warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. CHEMINOVA MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

**INHERENT RISKS OF USE**
It is impossible to eliminate all risks associated with the use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label), such as unfavorable temperature, soil conditions, etc., abnormal conditions (such as excessive rainfall, drought, hail, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Cheminova or the seller. All such risks shall be assumed by the Buyer.

**LIMITATION OF REMEDIES**
The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Cheminova's election, one of the following:

(1) Refund of purchase price paid by buyer or user for product bought, or
(2) Replacement of amount of product used.

Cheminova shall not be liable for losses or damages resulting from handling or use of this product unless Cheminova is promptly notified of such loss or damage in writing. In no case shall Cheminova be liable for consequential, incidental, damages or losses. The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Cheminova or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

**C 02/27/75**