



33657-16

10/15/2004

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Please read instructions on reverse before completing form.

Form Approved. OMB No. 2070-0060

	United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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Application for Pesticide - Section I

1. Company/Product Number 33657-16	2. EPA Product Manager R. Kumar	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Dinotefuran 20% Turf and Ornamental	PM#	
5. Name and Address of Applicant (Include ZIP Code) MITSUI CHEMICALS, INC. c/o Landis International, Inc. P.O. Box 5126, Valdosta, GA 31603-5126 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	NOTIFICATION OCT 15 2004
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Notification of revision of warranty statement, addition of "fungus gnats" to pests controlled, addition of the word "serpentine" to leafminers in pests controlled, and addition of the word "suppression" next to aphids per PR Notice 98-10.

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula for this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	* Certification must be submitted	<input type="checkbox"/> Metal	<input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.		No. per container	
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled				<input type="checkbox"/> Other _____	

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name WM. RONALD LANDIS	Title REGULATORY AGENT	Telephone No. (Include Area Code) 229-247-6472
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature	3. Title REGULATORY AGENT	
4. Typed Name WM. RONALD LANDIS	5. Date	

GROUP	4A	INSECTICIDE
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DINOTEFURAN 20 % TURF AND ORNAMENTAL

For foliar and systemic insect control in ornamental plants and turfgrass.
 For Greenhouse and Outdoor Use Only

Active Ingredient:

Dinotefuran, (RS)-1-methyl-2-nitro-3-(tetrahydro-3-furylmethyl)guanidine	20%
Other Ingredients	80%
Total:	100%

KEEP OUT OF REACH OF CHILDREN
CAUTION
See side panels for additional precautionary statements

FIRST AID	
If On Skin Or Clothing	<ul style="list-style-type: none"> • 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.
If Swallowed	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Have person sip a glass of water if able to swallow. • Do not give anything by mouth to an unconscious person.
If In Eyes	<ul style="list-style-type: none"> • 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 further treatment advice.
If Inhaled	<ul style="list-style-type: none"> • 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 poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC (800) 424-9300 (24 hours) for emergency medical treatment information.</p>	
<p><i>See side/back panels for additional precautionary statements</i></p>	

EPA Reg No. 33657-16

Net Contents:

EPA Establishment No. 67545-AZ 01

Manufactured By:
MITSUI CHEMICALS, INC.
 Shiodome City Center
 1-5-2 Higashi-Shimbashi
 Minato-ku, Tokyo 105-7117
 JAPAN

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTION EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- Shoes plus socks

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist 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 shrimp. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not dispose equipment washwaters or rinsate into a natural drain or water body.

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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

SPRAY DRIFT ADVISORY

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crop thereof rendered for sale, use or consumption.

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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, greenhouses and handlers of agricultural insecticides. 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
- Chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride
- 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.

Do not allow others to enter treated areas until sprays have dried.

GENERAL INFORMATION

Application to Turfgrass:

- Dinotefuran 20% Turf and Ornamental can be used for the control of soil inhabiting pests of turfgrass such as Masked Chafers, European Chafer, Green June Beetle, May or June Beetle, Japanese Beetle, Oriental Beetle, Billbugs, Annual Bluegrass Weevil, Black Turfgrass Ataenius and Mole Crickets. Dinotefuran 20% Turf and Ornamental can also be used for the suppression of cutworms and chinchbugs in turfgrass areas.
- Dinotefuran 20% Turf and Ornamental can be used as directed on outdoor residential, recreational and commercial turfgrass in sites such as home lawns, commercial lawns, multi-family residential and apartment complexes, grounds or lawns around business and office complexes, shopping centers, airports, military and other institutions, cemeteries, golf courses, playgrounds, parks, athletic fields and sod farms.
- Timing of Dinotefuran 20% Turf and Ornamental applications should be targeted at or just prior to or during egg laying of the target pests. The need for an application can be based on historical and/or physical monitoring of the site, current season adult trapping, previous experience or other methods. Optimum control will be achieved when

DINOTEFURAN 20 % TURF AND ORNAMENTAL

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applications are made prior to or at egg hatch of the target pests followed by sufficient irrigation or rainfall to move the active ingredient through the turf thatch layer. Consult your local State Extension Service for more specific application timing recommendations.

- Applications should not be made when the target site is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist.

Application to Ornamental plants:

- Dinotefuran 20% Turf and Ornamental can be applied as a foliar spray or broadcast spray for insect control in ornamental plants in commercial or residential landscapes, greenhouses and nurseries.
- Dinotefuran 20% Turf and Ornamental is a systemic product and will be taken up by the root system and foliage and translocated upward throughout the plant. When applied as a foliar spray, the product offers locally systemic control of foliar pests.
- Application can be made by foliar sprays or soil applications, including drenches and broadcast foliar sprays.
- When applied as a drench to plants with woody stems, systemic activity will be delayed until the product can be translocated throughout the plant. Make applications prior to buildup of the target pest.
- For outdoor and landscape ornamentals, broadcast applications cannot exceed a total of 2.7 lbs of product (0.54 lb. active ingredient) per acre per year.

MIXING INSTRUCTIONS:

Dinotefuran 20% Turf and Ornamental Alone: Add ½ of the required amount of water to the mix tank. With the agitator running, add the desired amount of Dinotefuran 20% Turf and Ornamental to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after Dinotefuran 20% Turf and Ornamental has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

Dinotefuran 20% Turf and Ornamental + Tank Mixtures: Add ½ of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order: products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, emulsifiable concentrates, and surfactants/adjuvants. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all the mixture has been applied.

NOTE: When using Dinotefuran 20% Turf and Ornamental in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including Dinotefuran 20% Turf and Ornamental. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using Dinotefuran 20% Turf and Ornamental in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

Compatibility

IMPORTANT - The crop safety of all potential tank mixes on all crops has not been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target crop should be confirmed.

Dinotefuran 20% Turf and Ornamental is compatible with most commonly used pesticides, crop oils, adjuvants, and nutritional sprays. However, since it is not possible to test all possible mixtures, the user should pre-test to assure the physical compatibility and lack of phytotoxic effect of any proposed mixtures with Dinotefuran 20% Turf and Ornamental. To determine the physical compatibility of Dinotefuran 20% Turf and Ornamental with other products, use a jar test, as described below:

Using a quart jar, add the proportionate amounts of the products to 1 quart of water. Add wettable powders and

water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for additional required ingredients to the spray tank.

RESISTANCE MANAGEMENT RECOMMENDATIONS

Dinotefuran 20% Turf and Ornamental contains a Group 4A insecticide. Insect biotypes with acquired resistance to Group 4A may eventually dominate the insect population if Group 4A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by Dinotefuran 20% Turf and Ornamental or other Group 4A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of Dinotefuran 20% Turf and Ornamental or other Group 4A insecticides that have a similar target site of action, on the same insect species.
- Using tank-mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturers for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact Landis International, Inc., a representative of Mitsui Chemicals, Inc., at toll free number: 1-800-526-3471 or at their web site: www.landisintl.com

APPLICATION PROCEDURES AND SPRAY EQUIPMENT

Ground Application: Spray nozzles should be selected which will provide accurate and uniform spray deposition. Use spray nozzles which provide medium-sized droplets and reduce drift. To help insure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult nozzle manufacturers and/or State Extension Service specialists.

Apply Dinotefuran 20% Turf and Ornamental using sufficient water volume to provide thorough and uniform coverage. In situations where a dense canopy exists and/or pest pressure is high, use greater water volumes. The use of a spray adjuvant may improve spray coverage. Avoid making applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Applications to turfgrass: Apply Dinotefuran 20% Turf and Ornamental through conventional spray equipment in a minimum of 1 gallon of finished spray per 1000 sq. ft. Ensure adequate distribution in the treated area using accurately calibrated equipment normally used for application of turfgrass insecticides. 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. Avoid skips by using marker dyes or foam aids.

Applications to ornamental plants: Dinotefuran 20% Turf and Ornamental can be applied using many different types of application equipment. Apply in sufficient water to ensure good coverage of ornamental plants. When making applications to plants with hard to wet foliage such as holly or pine, 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 spray area as would be used in a dilute solution. To assure optimum effectiveness, the product must be placed where the growing portion of the target plant can absorb the active ingredient. Applications can be made to foliage or as a soil drench.

RESTRICTIONS

- Do not graze treated areas or use clippings from treated areas for feed or forage.
- Avoid runoff or puddling of irrigation water following application.
- Keep children and pets off treated areas until spray has dried.
- Avoid application to areas which are water logged or saturated, or frozen, which will not allow penetration into the root zone of the plant.

APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION):

Dinotefuran 20% Turf and Ornamental alone or in combination with other products which are registered for application through sprinkler irrigation may be applied through irrigation systems where so noted in the soil application of each crop. Apply this product only through center pivot, solid set, hand move, or moving wheel irrigation systems (Turfgrass) or microirrigation (individual spaghetti tube), drip irrigation, overhead irrigation, or motorized calibrated irrigation equipment (Ornamentals). Do not apply through any other type of irrigation system. Lack of effectiveness can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. 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 and make necessary adjustments should the need arise.

Using Water from Public Water Systems:

DO NOT APPLY DINOTEFURAN 20% TURF & ORNAMENTAL THROUGH ANY IRRIGATION SYSTEM PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM.

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 per year. Dinotefuran 20% Turf and Ornamental may be applied through irrigation systems which may be supplied by a public water system only if the water from the public water system is 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 to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements:

Operating Instructions for All Recommended Types of Irrigation Systems:

1. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.
2. 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.
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.
6. 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.
7. 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.
8. Do not apply when wind speed favors drift beyond the area intended.

Calibration and Application Instructions:

Dinotefuran 20% Turf and Ornamental should be applied under the schedule specified in the specific use recommendations, not according to the irrigation schedule unless the events coincide. In general, set the equipment to apply the minimum amount of water per acre. Run the system at 86 - 90% of the manufacturer's maximum rated travel speed.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

Center Pivot Irrigation Equipment:

NOTES: 1) Use only drive systems that provide uniform water distribution. 2) Do not use end guns when chemigating Dinotefuran 20% Turf and Ornamental through center pivot systems because of non-uniform application. 3) Plug the first nozzle closest to the well head to protect the water source.

1. Determine the size of the area to be treated.
2. Determine the time required to apply 0.1 - 0.25 inches of water over the area to be treated when the system and injection equipment are operated at normal pressures as recommended by the equipment manufacturer. Run the system at 80-95% of the manufacturer's rated maximum travel speed.
3. Using water, determine the injection pump output when operated at normal line pressure.
4. Determine the amount of Dinotefuran 20% Turf and Ornamental, and any tank mix partners, required to treat the area covered by the irrigation system.
5. Add the required amount of Dinotefuran 20% Turf and Ornamental, and any tank mix partners, and sufficient water to meet the injection time requirements to the solution tanks. (See "Mixing Instructions" section of this label.)
6. Make sure the system is fully charged with water before starting injection of the Dinotefuran 20% Turf and Ornamental solution. Time the injection to last at least as long as it takes to bring the system to full pressure.
7. Inject the specified amount of Dinotefuran 20% Turf and Ornamental per acre continuously for one complete revolution of the system.
8. Stop the injection equipment after treatment is complete. Continue to operate the system until the Dinotefuran 20% Turf and Ornamental solution has cleared all of the sprinkler heads.
9. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water.

Solid Set, Hand Move, and Moving Wheel Irrigation Equipment:

1. Determine the acreage covered by the sprinklers.
2. Fill injector solution tank with plain water and calibrate the flow rate of the system to deliver the contents of the tank over a 20-40 minute time interval.
3. Determine the amount of Dinotefuran 20% Turf and Ornamental required to treat the area covered by the irrigation system.
4. Add the required amount of Dinotefuran 20% Turf and Ornamental, and any other tank mix partners, into the same quantity of water used to calibrate the injection period. (See "Mixing Instructions" section of this label.)
5. Operate the system at the same pressure and time interval established during the calibration.
6. Inject specified amount of Dinotefuran 20% Turf and Ornamental per acre for either a 20-40 minute period at the end of a regular irrigation set, or as a 20-40 minute injection as a separate application not associated with a regular irrigation to maximize retention of the insecticide by the foliage.
7. Stop injection equipment after treatment is completed. Continue to operate the system until the Dinotefuran 20% Turf and Ornamental solution has cleared the last sprinkler head. To ensure lines are flushed and free from remaining pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

RECOMMENDATIONS TO AVOID SPRAY DRIFT

As with all crop protection products, it is important to avoid off-target movement. Do not allow spray to drift onto adjacent land, crops, or aquatic areas. Follow these recommendations to avoid spray drift:

1. Make applications when wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 10 mph. Avoid applications when wind gusts approach 10 mph.
2. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
3. Do not cultivate or plant crops within 25 feet of the aquatic area as to allow growth of a vegetative filter strip.
4. Do not make applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with increased height above the ground. Mist or fog may indicate the presence of an inversion in

humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

5. Use the largest droplet size consistent with good pest control. Small droplets are more prone to spray drift and can be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
6. Apply as close to target plants as practical to obtain a good spray pattern for adequate coverage. Applications more than 10 ft. above the crop canopy should be avoided.
7. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Air Assisted (Air Blast) Tree and Vine Sprayers (Ornamentals Only): Air assisted tree and vine sprayers carry droplets into the canopy of trees and vines via a radially or laterally directed air stream.

In addition to the general drift management principles already described, the following specific practices will further reduce the potential for drift:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy.
- Block off upward pointed nozzles when there is no overhanging canopy.
- Use only enough air volume to penetrate the canopy and provide good coverage. Use a minimum of 50 gallons finished spray per acre.
- Do not allow spray to go beyond the edge of the cultivated area. Spray the outside row only from outside the planting.

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TURFGRASS

Crop	Pest	Product Rate	Remarks
Turfgrasses Residential Recreational Commercial	Mole cricket Southern mole cricket Tawny mole cricket	2.7 lbs. per acre (1 oz. per 1000 sq. ft.)	Make application prior to or during the peak egg hatch period. When adults or large nymphs are present and actively tunneling, application should be accompanied by a curative insecticide such as Orthene® Turf, Tree & Ornamental Spray.
	White grub larvae such as: Annual bluegrass weevil Asiatic garden beetle Billbug Black Turfgrass ataenius European chafer Green June beetle Japanese beetle May/June beetle Northern masked chafer Oriental beetle Southern masked chafer	2.7 lbs. per acre (1 oz. per 1000 sq. ft.)	For optimum control of grubs, billbugs, and annual bluegrass weevil, make application prior to or during egg hatch of the target pest.
	Suppression of: Cutworms Chinchbug Sod webworm	2.7 lbs. per acre (1 oz. per 1000 sq. ft.)	For suppression of chinchbugs, make application prior to hatching of the first instar nymphs.
Important Notes: <ul style="list-style-type: none"> • Apply in sufficient water to ensure thorough coverage of target area. Use a minimum of 50 gallons finished spray per acre. • Consult your local State Extension Service or State Extension Turfgrass Specialists for more specific information on timing of insecticide applications. • For optimal control, irrigation or rainfall should occur within 24 hours after application to ensure movement of the active ingredient through the thatch. • Avoid mowing turf or lawn grass until after sufficient irrigation or rainfall has occurred so that uniformity of application will not be affected. • Do not apply more than a total of 2.7 lbs. of Dinotefuran 20% Turf and Ornamental (0.54 lbs. ai) per acre per year. 			

ORNAMENTAL PLANTS

For insect control in ornamental plants grown in commercial, industrial, and residential areas, indoor and outdoor nursery and greenhouse ornamental production.			
Crop	Pest	Product Rate	Remarks
Ornamental plants including: Shrubs Ornamentals Flowering Plants Foliage Plants Ground Covers Evergreens Ornamental Trees Non-Bearing Fruit Trees Non-Bearing Nut Trees Non-Bearing Vines	Adelgids Aphids (suppression) Asian cycad scale Florida wax scale Japanese beetles (adults) Lacebugs Leaf beetles Leafhoppers (suppression) Leafminers, serpentine Mealybugs Sawfly larvae Scale (Armored and Soft) Tea scale Thrips (suppression) Whiteflies Giant whitefly Greenhouse whitefly Silverleaf whitefly	Foliar Spray ¼ to ½ lb. per 100 gallons (4 to 8 oz. per 100 gallons) (0.05 to 0.1 lbs. ai per 100 gallons)	For foliar insect control on ornamental plants. Start treatment prior to buildup of high pest populations. If necessary, make a second application after 14-21 days. Foliar Spray: 100 gals. of spray mix will treat 20,000 sq. ft. of area.
	Aphids Asian cycad scale Florida wax scale Fungus gnats Leafminers Mealybugs Scale (Armored and Soft) Tea scale Thrips Whiteflies Giant whitefly Greenhouse whitefly Silverleaf whitefly	Drench ¼ to 1½ lbs. per 100 gallons (12 to 24 oz. per 100 gallons) (0.15 to 0.3 lbs. ai per 100 gallons)	Drench: Apply 4 fluid ounces of finished solution per 6" pot. Adjust amount of drench solution for smaller or larger pot size.
Do not apply more than a total of 2.7 lbs. of Dinotefuran 20% Turf and Ornamental (0.54 lb. ai) per acre per season as foliar sprays.			

STORAGE AND DISPOSAL

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

Pesticide Storage: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool dry place. Do not store diluted spray. For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-CLEANUP.

Pesticide Disposal: Wastes 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.

EITHER**CONDITIONS OF SALE**

MITSUI CHEMICALS, INC., warrants that this product in its unopened package conforms to the chemical description on the label and is reasonably fit for the purposes set forth on the label when used according to directions under normal use conditions to the crops specified. There are no other warranties, expressed or implied, concerning the use of this product other than indicated on the label. This warranty does not extend to the handling or use of this product contrary to label instructions or under abnormal conditions or conditions not reasonably foreseeable to seller, and buyer assumes all risk of any such use.

OR**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 Mitsui Chemicals, Inc.. 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.

Mitsui Chemicals, Inc. 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.

LIMITED WARRANTY

Mitsui Chemicals, Inc. 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

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LIMITATION OF LIABILITY

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PROMPT NOTICE OF CLAIM

Mitsui Chemicals, Inc. 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 later, so that an immediate inspection of the affected property and growing crops can be made.

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

NO AMENDMENTS

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