

PM 23

100-691

5-14-98

10/14

Please read instructions on reverse before completing form. Form Approved, OMB No. 2070-0060. Approval expires 2-28-95

	United States <b>Environmental Protection Agency</b> Washington, DC 20460	<input type="checkbox"/> Registration <input checked="" type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <b>238659</b>
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**Application for Pesticide Section I**

<b>1. Company/Product Number</b> 100-691	<b>2. EPA Product Manager</b> J. A. Miller	<b>3. Proposed Classification</b> <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
<b>4. Company/Product (Name)</b> Pennant Liquid Herbicide	<b>PM#</b> 23	
<b>5. Name and Address of Applicant (Include ZIP Code)</b> Novartis Crop Protection, Inc. P.O. Box 18300 Greensboro, NC 27419 <input type="checkbox"/> Check if this is a new address		<b>6. Expedited Review.</b> 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 checked="" type="checkbox"/> Final printed labels in response to Agency letter dated <u>2/9/98</u>	<b>NOTIFICATION</b> <b>MAY 14 1998</b>
<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.) Revised Ingredient Statement in accordance with PR Notices 97-5 and 97-6. This notification is consistent with the provisions of PR Notice 95-2 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of 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 95-2 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**

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

**Section - IV**

<b>1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</b>		
<b>Name</b> Karen S. Stumpf	<b>Title</b> Senior Regulatory Manager	<b>Telephone No. (Include Area Code)</b> 336 632 2169
<b>Certification</b> 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.		<b>6. Date Application Received (Stamped)</b>   
<b>2. Signature</b> 	<b>3. Title</b> Senior Regulatory Manager	
<b>4. Typed Name</b> Karen S. Stumpf	<b>5. Date</b> 5/1/98	

2014

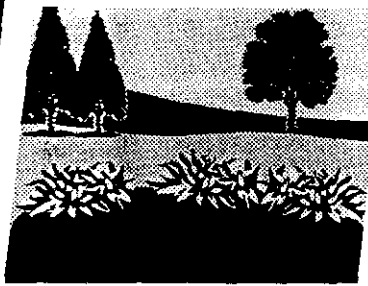
**NOTIFICATION**  
**MAY 14 1998**

PULL HERE TO OPEN ▶

# **Pennant<sup>®</sup>**

## **Liquid**

### **HERBICIDE**



For weed control  
in nurseries, turf,  
and landscape  
plantings

Active Ingredient:	
Metolachlor (CAS #51218-45-2) ...	86.4%
Other Ingredients:	13.6%
Total:	100.0%

**KEEP OUT OF REACH  
OF CHILDREN.**

**CAUTION**

Pennant Liquid contains 8 lbs. active  
ingredient per gallon.

See additional precautionary  
statements and directions for  
use inside booklet.

EPA Reg. No. 100-691


**NCP 691A-L1L 0298**

EPA Est. 11773-IA-01<sup>®</sup>

EPA Est. 34704-MS-1<sup>®</sup>

(Superscript is first letter  
of lot number on jug)

**ONE GALLON**  
U.S. Standard Measure

 **NOVARTIS**

**DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY**

**IMPORTANT:** Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product. If terms are not acceptable, return the unopened product container at once.

**CONDITIONS OF SALE AND WARRANTY**

The Directions for Use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing Conditions of Sale and Warranty, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

**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 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 24 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, such as barrier laminate 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.

**Do not enter or allow others to enter the treated area until sprays have dried.**

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR WEED CONTROL, CROP INJURY, AND/OR ILLEGAL RESIDUES.**

**GENERAL INFORMATION**

Pennant Liquid herbicide controls many annual grasses, certain broadleaf weeds, and yellow nutsedge. Pennant Liquid may be used on commercial and residential turf and other noncrop land, including, but not limited to: airports, roadsides, golf courses, sports fields, public recreational areas, ornamental gardens, cemeteries, and other landscaped areas. Pennant Liquid may also be used in and around container and field-grown ornamentals, nonbearing nursery stock, and on sod farms.

**DO NOT USE IN GREENHOUSES OR OTHER ENCLOSED STRUCTURES.**



# Pennant® Liquid

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Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas.

To prevent off-site movement due to runoff or wind erosion:

1. Avoid treating powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
2. Do not apply to impervious substrates such as paved or highly compacted surfaces.
3. Do not use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.

**NOTICE TO USER:** Plant tolerances to Pennant Liquid herbicide have been found to be acceptable in the specific genera and species listed on this label. Because of the large number of species and varieties of plants, it is impossible to test each for tolerance to Pennant Liquid. Neither the manufacturer nor the seller has determined whether or not Pennant Liquid can be used safely on plants not specified on this label. Therefore, the professional user should determine if Pennant Liquid can be used safely by testing the recommended rates on a particular group of similar unlabeled ornamental plants in a small area before widespread use or by checking with the local weed specialist for guidance. Likewise, if the professional user plans to apply Pennant Liquid for control of weed species not listed on this label, Pennant Liquid should be tested on a small-scale basis before widespread use or the local weed specialist contacted for guidance.

## Mixing Instructions

**Pennant Liquid Alone:** Mix Pennant Liquid with water or fluid fertilizer and apply as a spray. Fill the spray tank 1/2-3/4 full with water or fluid fertilizer, start agitation, add the proper amount of Pennant Liquid, then add the rest of the water or fluid fertilizer. Agitate continuously during mixing and application to maintain a uniform emulsion.

**Tank Mixtures:** Fill the spray tank 1/4 full with water or fluid fertilizer, and start agitation, then add the tank mix partner, allowing it to become dispersed. Then add Pennant Liquid, and finally the rest of the water or fluid fertilizer. Agitate continuously during mixing and application to maintain uniformity. Check compatibility of mixture with fluid fertilizer as described below before mixing in spray tank.

**Note:** Before using Pennant Liquid in a tank mix with fluid fertilizer or registered pesticides, determine the tolerance of the plant species by applying the combination to a limited area during a period of active growth.

**Compatibility Test:** Since liquid fertilizers can vary, even within the same analysis, always check compatibility with herbicide(s) each time before use. Be especially careful when using complete suspension or fluid fertilizers, as serious compatibility problems are more likely to occur. Commercial application equipment may improve compatibility in some instances. The following test assumes a spray volume of 25 gals./A. For other spray volumes, make appropriate changes in the ingredients. Check compatibility using this procedure.

1. Add 1 pt. of fertilizer to each of 2 one-qt. jars with tight lids.
2. To one of the jars, add 1/4 tsp. or 1.1 milliliters of a compatibility agent approved for this use, such as Complex® or Unite® (1/4 tsp. is equivalent to 2 pts./100 gals. spray). Shake or stir gently to mix.
3. To both jars, add the appropriate amount of herbicide(s). If more than one herbicide is used, add them separately with dry herbicides first, flowables next, and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix. The appropriate amount of herbicides for this test follows:

**Dry herbicides:** For each pound to be applied per acre, add 1.5 level teaspoons to each jar.

**Liquid herbicides:** For each pint to be applied per acre, add 0.5 teaspoon or 2.5 milliliters to each jar.

After adding all ingredients, put lids on and tighten, and invert each jar 10 times to mix. Let the mixtures stand 15 minutes and then look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. Determine if the compatibility agent is needed in the spray mixture by comparing the 2 jars. If either mixture separates, but can be readily remixed, the mixture can be sprayed as long as good agitation is used. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry herbicide(s) in water before addition, or (b) add 1/2 of the compatibility agent to the fertilizer and the other 1/2 to the emulsifiable concentrate or flowable herbicide before the addition to the mixture. If incompatibility is still observed, do not use the mixture.

4. After conducting the compatibility test, any pesticide wastes should be disposed of according to the instructions given in the **Storage and Disposal** section at the end of this label.

**Ground Application:** Apply Pennant Liquid alone or in tank mixtures by ground equipment in a minimum of 10 gals. of spray mixture per acre, unless otherwise specified.

Use sprayers that provide accurate and uniform application. For Pennant Liquid tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh. Rinse sprayer thoroughly with clean water immediately after use.

Calculate the amount of herbicide needed for band treatment by the formula:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre of field}$$

**Aerial Application (Sod Farms Only):** Apply Pennant Liquid in water alone or in tank mixtures with AAtrex®, Princep®, or other herbicides registered for use on sod farms in a minimum total volume of 2 gals./A by aircraft. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. In order to assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10 ft., using low-drift nozzles at a maximum pressure of 40 psi, and restrict application to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive nontarget plants, apply Pennant Liquid or Pennant Liquid mixtures at a minimum upwind distance of 400 ft. from sensitive plants.

Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

### Aerial Drift Management

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information** section below.

### Aerial Drift Reduction Advisory Information

#### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions**).

#### Controlling Droplet Size

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### Boom Length

For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

#### Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**Sensitive Areas**

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

**Overhead or Microjet Irrigation Application:** Pennant Liquid alone or in tank mixture with other herbicides which are registered for overhead or microjet application may be applied in irrigation water at rates recommended on this label. Apply this product **only** through an overhead or microjet irrigation system. Do not apply this product through any other type of irrigation system. Crop injury or lack of effectiveness can result from nonuniform 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 application 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 and 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Prepare a mixture with a minimum of 1 part of water to 1 part herbicide(s) and inject this mixture into the overhead or microjet system. Injecting a larger volume of a more dilute mixture per hour will usually provide more accurate calibration of metering equipment. Maintain sufficient agitation to keep the herbicide in suspension.
9. Meter into irrigation water during entire period of water application.
10. Apply in 1/2-1 inch of water. Use the lower water volume (1/2 inch) on coarse-textured soils and the higher volume (1 inch) on fine-textured soils. More than 1 inch of water at application may reduce weed control by moving the herbicide below the effective zone in the soil.

*Precaution for overhead or microjet applications: Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, injury to desirable plants may result.*

**Dry Bulk Granular Fertilizers**

Many dry bulk granular fertilizers may be impregnated or coated with Pennant Liquid alone or with selected Pennant Liquid tank mixtures which are registered and not prohibited from use on dry bulk granular fertilizers.

When applying Pennant Liquid or Pennant Liquid mixtures with dry bulk granular fertilizers, follow all directions for use and precautions on the respective product labels regarding target crops, rates per acre, soil texture, application methods (including timing of application), and rotational crops.

All individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the granular herbicide/fertilizer mixtures by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Pennant Liquid or Pennant Liquid tank mixtures onto the fertilizer must be placed to provide uniform spray coverage.

## Pennant® Liquid

If the herbicide/fertilizer mixture is too wet, use a highly absorptive material, such as Agsorb® granules, Microcel E (Johns-Marville Products Corporation), diatomaceous earth, or finely powdered clay, to obtain a dry free-flowing mixture. Add the absorptive material separately and uniformly to the herbicide/fertilizer mixture and blend to form a suitable free-flowing mixture. Generally, less than 2% by weight of absorptive material will be needed.

Calculate amounts of Pennant Liquid and other herbicides needed by the following formula:

$$\frac{2,000}{\text{lbs. of fertilizer per acre}} \times \text{pts./A of liquid or flowable product} = \text{pts. of liquid or flowable product per ton of fertilizer}$$

$$\frac{2,000}{\text{lbs. of fertilizer per acre}} \times \text{lbs./A of dry product} = \text{lbs. of dry product per ton of fertilizer}$$

*Precautions: To avoid potential for explosion, (1) Do not impregnate Pennant Liquid or Pennant Liquid mixtures on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine mixtures of Pennant Liquid plus any other herbicide with single superphosphate (0-20-0) or treble superphosphate (0-46-0). (3) Do not use Pennant Liquid or Pennant Liquid mixtures on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.*

### Application

Apply 100-800 lbs. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential to prevent possible crop injury. Nonuniform application may also result in unsatisfactory weed control. In areas where conventional tillage is practiced, a shallow incorporation of the mixture into the soil may improve weed control. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced tillage situations or in some conventional tillage situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting.

*Precaution: To avoid potential injury of ornamental plants, do not use the herbicide/fertilizer mixture where planting beds are to be formed.*

## NURSERIES AND LANDSCAPE PLANTINGS

Apply Pennant Liquid at rates indicated below to control many annual grasses, certain broadleaf weeds, and yellow nutsedge (see following list). Calibrate applicator before application according to the manufacturer's directions.

Weeds Controlled			Weeds Partially Controlled*
annual bluegrass	green foxtail	black nightshade	common purslane
barnyardgrass (watergrass)	prairie cupgrass	carpetweed	groundsel
crabgrass	red rice	Florida pusley	hairy nightshade
crowfootgrass	signalgrass	galinsoga	sandbur
fall panicum	( <i>Brachiaria</i> )	pigweed	seedling johnsongrass
foxtail millet	southwestern cupgrass		shattercane
giant foxtail	witchgrass		volunteer sorghum
goosegrass	yellow foxtail		
	yellow nutsedge		

\*Control of these weeds can be erratic due partially to variable weather conditions.

### Application

Apply Pennant Liquid in sufficient carrier to obtain thorough coverage. For liquid carriers, use a minimum of 10 gals./A. Apply before grass, broadleaf weeds, or yellow nutsedge emerge, or after existing weeds or nutsedge plants have been removed. A second application may be needed to provide control for an extended period.

### Suggested Rates of Pennant Liquid

Soil Texture	Pts./A*	ml/1,000 sq. ft.
Coarse	2-3	22-33
Medium	2-3	22-33
Fine	3-4	33-43

\*Use higher rates for a given soil texture on high organic matter soils and where yellow nutsedge and/or a heavy infestation of weeds is expected. Use the lower rates on soils with low organic matter content and where light infestations of weeds are expected. In peat and muck soils and soils highly enriched with organic matter (i.e., sawdust) and/or synthetic mixes, the activity of Pennant Liquid may be reduced.

If banded applications are used, refer to the **General Information** section of this label to calculate the amount of Pennant Liquid needed.

## Pennant® Liquid

**Precautions: (1) To avoid plant injury, do not apply Pennant Liquid to seedbeds, cutting beds, or unrooted cuttings before transplanting or to plants until the soil has firmly settled around roots. (2) When Pennant Liquid is applied broadcast over-the-top of plant foliage, follow with sufficient overhead irrigation to wash Pennant Liquid from the foliage to reduce the chance of injury.**

Pennant Liquid has been found to be safe on the following plants:

### Container-Grown Plants

Scientific Name	Common Name/Variety
<i>Abelia grandiflora</i>	Glossy Abelia
<i>Acer rubrum</i>	Red Maple
<i>Ajuga reptans</i>	Ajuga
<i>Aucuba japonica variegata</i>	Variegated Aucuba
<i>Betula nigra</i>	River Birch
<i>Buxus</i> spp.	Boxwood
<i>Carex</i> spp.	Carex
<i>Cornus</i> spp.	Dogwood
<i>Cotoneaster</i> spp.	Cotoneaster
<i>Euonymus fortunei</i>	Euonymus
<i>Euonymus kiautschovicus</i>	Manhattan Euonymus
<i>Forsythia</i> spp.	Forsythia
<i>Gardenia jasminoides</i>	Gardenia
<i>Hedera helix</i>	English Ivy
<i>Hosta lancifolia</i>	Variegated Hosta
<i>Ilex attenuata</i>	Savannah Holly
<i>Ilex cornuta</i>	Dwarf Burford Holly
<i>Ilex crenata</i>	Japanese Holly
<i>Juniperus chinensis</i>	Chinese Juniper
<i>Juniperus horizontalis</i>	Juniper
<i>Juniperus sabina</i>	Hick's Juniper/Foemina
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Kalmia</i> spp.	Mountain Laurel
<i>Leucothoe fontanesiana</i>	Leucothoe
<i>Ligustrum japonicum</i>	Ligustrum or Privet
<i>Liriope muscara</i>	Liriope
<i>Liriope spicata</i>	Green Liriope
<i>Myrica cerifera</i>	Wax Myrtle
<i>Ophiopogon japonicus</i>	Mondo Grass
<i>Pachysandra terminalis</i>	Japanese Pachysandra
<i>Pinus strobus</i>	White Pine
<i>Pinus thunbergii</i>	Japanese Black Pine
<i>Pittosporum tobira</i>	Pittosporum
<i>Quercus phellos</i>	Willow Oak
<i>Rhododendron catawbiense</i>	Catawba Azalea
<i>Rhododendron indica</i>	Formosa/Indica Azalea
<i>Rhododendron obtusum</i>	Kurume Azalea
<i>Taxus cuspidata</i>	Yew
<i>Thuja occidentalis</i>	Globe Arborvitae
<i>Tsuga canadensis</i>	Hemlock
<i>Viburnum</i> spp.	Viburnum
<i>Yucca</i> spp.	Yucca



## Pennant® Liquid

### Field- and Liner\*-Grown Plants and Plants in Landscape Plantings

\* Plants transplanted normally in rows in a nursery or similar area for further growth before transplanting to final growing location (place of establishment).

Scientific Name	Common Name/Variety
<i>Abelia</i> spp.	Glossy Abelia
<i>Abies</i> spp.	Fir
<i>Acer</i> spp.	Maple
<i>Achillea</i> spp.	Yarrow
<i>Agapanthus africanus</i>	African Lily
<i>Ageratum</i> spp.	Blue Ageratum
<i>Ajuga reptans</i>	Ajuga
<i>Allium</i> spp.	Allium
<i>Allyssum</i> spp.	Allyssum
<i>Antirrhinum majus</i>	Snapdragon
<i>Aquilegia</i> spp.	Columbine
<i>Artemisia stoleriana</i>	Dusty Miller
<i>Asclepias</i> spp.	Milkweed
<i>Aster</i> spp.	Aster
<i>Aucuba</i> spp.	Aucuba
<i>Berberis</i> spp.	Barberry
<i>Betula</i> spp.	Birch
<i>Bougainvillea</i> spp.	Bougainvillea
<i>Buxus</i> spp.	Boxwood
<i>Camellia</i> spp.	Camellia
<i>Campanula carpatica</i>	Bellflower
<i>Canna indica</i>	Canna Lily
<i>Carex</i> spp.	Carex
<i>Chrysanthemum</i> spp.	Chrysanthemum, Daisy
<i>Citrus</i> spp.**	Citrus**
<i>Coreopsis</i> spp.	Coreopsis
<i>Cornus</i> spp.	Dogwood
<i>Cortaderia selboana</i>	Pampas Grass
<i>Cotoneaster</i> spp.	Cotoneaster
<i>Crocus</i> spp.	Crocus
<i>Cryophytum crystallium</i>	Ice Plant
<i>Cytisus racemosus</i>	Sweet Broom
<i>Daucus carota</i>	Queen Anne's Lace
<i>Delphinium</i> spp.	Delphinium
<i>Dianthus barbatus</i>	Sweet William
<i>Eleagnus</i> spp.	Eleagnus
<i>Endymion</i> spp.	Endymion
<i>Escallonia fradesii</i>	Escallonia
<i>Euonymus</i> spp.	Euonymus
<i>Ficus</i> spp.	Fig
<i>Forsythia</i> spp.	Forsythia
<i>Fraxinus</i> spp.	Ash
<i>Gaillardia</i> spp.	Gaillardia
<i>Gardenia jasminoides</i>	Gardenia
<i>Gazania splendoens</i>	Gazania Gold Rush
<i>Gelsemium sempervirens</i>	Carolina Jessamine
<i>Geranium</i> spp.	Geranium
<i>Geum</i> spp.	Geum
<i>Ginkgo biloba</i>	Ginkgo
<i>Gladiolus x hortulanus</i>	Gladiolus
<i>Gleditsia triacanthos</i>	Honey Locust
<i>Hedera</i> spp.	English Ivy
<i>Hemerocallis</i> spp.	Daylily
<i>Hibiscus</i> spp.	Hibiscus
<i>Hosta lancifolia</i>	Hosta
<i>Hyacinthus</i> spp.	Hyacinth
<i>Hydrangea</i> spp.	Hydrangea
<i>Hypericum</i> spp.	St. John's Wort
<i>Ilex</i> spp.	Holly
<i>Illicium</i> spp.	Spicebush
<i>Impatiens</i> spp.	Impatiens
<i>Iris</i> spp.	Iris
<i>Jasmine</i> spp.	Jasmine
<i>Juniperus</i> spp.	Juniper
<i>Kalmia</i> spp.	Kalmia
<i>Lagerstroemia</i> spp.	Crepe Myrtle
<i>Leucothoe</i> spp.	Leucothoe
<i>Ligustrum</i> spp.	Privet
<i>Lilium</i> spp.	Lily

\*\* Do not apply to trees or plants that will bear harvestable fruit within 12 months, or illegal residues may result.

# Pennant® Liquid

Scientific Name	Common Name/Variety
<i>Liquidambar</i> spp.	Sweetgum
<i>Liriodendron tulipifera</i>	Tulip Tree
<i>Liriope</i> spp.	Liriope
<i>Lonicera</i> spp.	Honeysuckle
<i>Lupinus</i> spp.	Lupines
<i>Lythrum</i> spp.	Loosestrife
<i>Magnolia</i> spp.	Magnolia
<i>Malus</i> spp.**	Crabapple, Apple**
<i>Mesembryanthemum crystallinum</i>	Ice Plant
<i>Morea</i> spp.	Fortnight Lily
<i>Muscari armeniacum</i>	Muscari
<i>Myrica</i> spp.	Wax Myrtle
<i>Nandina domestica</i>	Bamboo
<i>Narcissus</i> spp.	Narcissus
<i>Nerium oleander</i>	Oleander
<i>Oenothera</i> spp.	Primrose
<i>Ophiopogon japonicus</i>	Mondo Grass
<i>Ornithogalum umbellatum</i>	Star of Bethlehem
<i>Osmanthus</i> spp.	Osmanthus
<i>Pachysandra</i> spp.	Pachysandra
<i>Pelargonium x hortorum</i>	Geranium
<i>Petunia</i> spp.	Petunia
<i>Phlox</i> spp.	Phlox
<i>Photinia</i> spp.	Photinia
<i>Physocarpus</i> spp.	Ninebark
<i>Physostegia</i> spp.	Physostegia
<i>Picea</i> spp.	Spruce
<i>Pieris japonica</i>	Japanese Andromeda
<i>Pinus</i> spp.	Pine
<i>Pittosporum</i> spp.	Pittosporum
<i>Podocarpus</i> spp.	Podocarpus
<i>Populus</i> spp.	Poplar
<i>Potentilla</i> spp.	Potentilla (Cinquefoil)
<i>Prunus</i> spp.**	Cherry**
<i>Pseudotsuga menziesii</i>	Douglas Fir
<i>Pyracantha</i> spp.	Firethorn
<i>Pyrus</i> spp.**	Pear**
<i>Quercus</i> spp.	Oak
<i>Raphiolepis</i> spp.	Indian Hawthorne
<i>Rhododendron</i> spp.	Rhododendron/Azalea
<i>Robinia</i> spp.	Locust
<i>Rosa</i> spp.	Rose
<i>Rumohra adiantiformis</i>	Leatherleaf Fern
<i>Salix</i> spp.	Willow
<i>Scilla</i> spp.	Scilla
<i>Sedum</i> spp.	Stone Crop
<i>Senecio doronicum</i>	Leopard's-bane
<i>Spiraea</i> spp.	Spiraea
<i>Stachys</i> spp.	Stachys
<i>Statice sinnata</i>	Annual Statice
<i>Symphoricarpos</i> spp.	Snowberry
<i>Syringa</i> spp.	Lilac
<i>Tagetes</i> spp.	Marigold
<i>Taxodium distichum</i>	Bald Cypress
<i>Taxus</i> spp.	Yew
<i>Ternstroemia gymnanthera</i>	Cleyera
<i>Thuja</i> spp.	Arborvitae
<i>Tsuga</i> spp.	Hemlock
<i>Tulipa</i> spp.	Tulip
<i>Veronica</i> spp.	Veronica
<i>Viburnum</i> spp.	Viburnum
<i>Vinca</i> spp.	Periwinkle
<i>Viola x Wittrockiana</i>	Pansy
<i>Washingtonia robusta</i>	Mexican Fan Palm
<i>Weigela</i> spp.	Weigela
<i>Wisteria senensis</i>	Wisteria
<i>Yucca</i> spp.	Yucca
<i>Zinnia</i> spp.	Zinnia

\*\* Do not apply to trees or plants that will bear harvestable fruit within 12 months, or illegal substances may result.

Pennant Liquid may be applied in tank mixtures with Goal®, Princep®, Ronstar®, Roundup®, or other compatible herbicides registered for use on ornamentals. Refer to the respective product labels for weeds controlled and for plants on which they are registered for use. When applying Pennant Liquid in tank mixtures, observe the more restrictive directions for use, precautions, and limitations on this label or the respective tank mix product label.

# Pennant® Liquid

## TURFGRASS

### Warm Season Grasses (Bermudagrass, Centipedegrass, St. Augustinegrass, Bahiagrass, and Zoysiagrass)

Do not use Pennant Liquid on turfgrasses in New York State.

Apply Pennant Liquid **before weeds emerge**. Since soil moisture is necessary to activate Pennant Liquid, irrigate with 1/2 inch of water if rainfall does not occur within 7 days after treatment (See following Precautions).

#### Weeds Controlled

Scientific Name	Common Name	Rate of Pennant Liquid*
<i>Cyperus compressus</i>	Annual sedge	4 pts./A
<i>Cyperus esculentus</i>	Yellow nutsedge	
<i>Digitaria ischaemum</i>	Smooth crabgrass	
<i>Digitaria sanguinalis</i>	Large crabgrass	
<i>Leptochloa fascicularis</i>	Bearded sprangletop	2-4 pts./A
<i>Leptochloa uninervia</i>	Mexican sprangletop	
<i>Poa annua</i>	Annual bluegrass	

\* 2 pts./A = 22 ml/1,000 sq. ft.

4 pts./A = 43 ml/1,000 sq. ft.

**Note:** To minimize potential turf injury, do not apply more than once per year.

#### Commercial St. Augustinegrass Sod Production

Apply Pennant Liquid **before weeds emerge**. Since soil moisture is necessary to activate Pennant Liquid, irrigate with 1/2 inch of water if rainfall does not occur within 7 days after treatment (See following Precautions).

#### Weeds Controlled

Scientific Name	Common Name	Rate of Pennant Liquid*
<i>Cyperus compressus</i>	Annual sedge	4 pts./A
<i>Cyperus esculentus</i>	Yellow nutsedge	
<i>Digitaria ischaemum</i>	Smooth crabgrass	
<i>Digitaria sanguinalis</i>	Large crabgrass	
<i>Leptochloa fascicularis</i>	Bearded sprangletop	2-4 pts./A
<i>Leptochloa uninervia</i>	Mexican sprangletop	
<i>Poa annua</i>	Annual bluegrass	

\* 2 pts./A = 22 ml/1,000 sq. ft.

4 pts./A = 43 ml/1,000 sq. ft.

**Notes:** (1) Do not apply more than once every six weeks. (2) Do not apply more than a total of 8 pts./A per year.

*Precautions for all uses on turf: Temporary slowing of growth and yellowing may occur following application. To avoid turf injury, (1) use only on turfgrass not under stress from infestations of insects, nematodes, or diseases; (2) do not use on golf greens, tees, or aprons; (3) do not apply over the rooting area of trees or ornamentals not listed on this label; (4) do not seed or overseed with desirable turfgrass 4 months before or 6 months after treatment, and (5) do not apply this product to newly seeded grasses until they have overwintered and have a well-developed rhizome system. (6) Before using Pennant Liquid in the tank mix with fluid fertilizer or other registered pesticides, determine the tolerance of the turf species by applying the combination to a limited area during a period of active growth. (7) In turfgrass areas which have heavy thatch, the weed control of Pennant Liquid may be reduced.*

**Note:** To avoid possible illegal residues, do not graze or feed turf clippings to animals.

## STORAGE AND DISPOSAL

#### Pesticide Disposal

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Wastes resulting from the use of this product are toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office.

# Pennant® Liquid

## Container Disposal

Do not reuse empty container. Triple rinse (or equivalent), puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. Keep out of smoke from burning containers.

This product may be stored at temperatures down to 30 degrees below 0°F.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

## PRECAUTIONARY STATEMENTS

### Hazards to Humans and Domestic Animals

#### CAUTION

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. This product may cause skin sensitization reactions in some people.

### Statement of Practical Treatment

**If in eyes:** Flush eyes with plenty of water. Get medical attention if irritation persists.

**If swallowed:** Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

**If on skin:** Wash with plenty of soap and water. Get medical attention if irritation persists.

**Note to Physician:** If swallowed, there is no specific antidote. Induce emesis or lavage stomach. Treat symptomatically. Administration of an aqueous slurry of activated charcoal can be considered.

### Personal Protective Equipment

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

#### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton
- Shoes plus socks

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.

### Engineering Control Statements

Mixers and loaders supporting aerial applications are required to use closed systems. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. When using the closed system, the mixers' and loaders' PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### 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

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 wash waters or rinsate.

### Ground Water Advisory

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

### Surface Water Advisory

Metolachlor can contaminate surface water through ground spray drift. Under some conditions, metolachlor may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

## Pennant® Liquid

### Mixing/Loading Instructions

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates.

Check-valves or antisiphoning devices must be used on all mixing and/or irrigation equipment.

This product may not be mixed or loaded within 50 ft. of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs. This product may not be mixed/loaded or used within 50 ft. of all wells, including abandoned wells, drainage wells, and sink holes. Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling or application equipment or containers within 50 ft. of any well are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rain water that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading sites.

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Novartis Crop Protection, Inc.

Turf and Ornamental Products

Greensboro, North Carolina 27419

NCP 691A-L1L 0298



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# Pennant® Liquid

## HERBICIDE

For weed control in nurseries,  
turf, and landscape plantings

Active Ingredient:	
Metolachlor (CAS #51218-45-2)	86.4%
Other Ingredients:	13.6%
Total:	100.0%

Pennant Liquid contains 8 lbs. active  
ingredient per gallon.

See directions for use in attached booklet.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance  
with its labeling and with the Worker  
Protection Standard, 40 CFR part  
170. Refer to supplemental labeling  
under "Agricultural Use Require-  
ments" in the Directions for Use  
section for information about this  
standard.

EPA Reg. No. 100-691

EPA Est. 11773-1A-01®

EPA Est. 34704-MS-1®

(Superscript is first letter of lot  
number on jug)

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Novartis Crop Protection, Inc.  
Turf and Ornamental Products  
Greensboro, North Carolina 27419  
NCP 691A-L1L 0298

**ONE GALLON**  
U.S. Standard Measure

**KEEP OUT OF REACH  
OF CHILDREN.  
CAUTION**

### Precautionary Statements

**Hazards to Humans and Domestic  
Animals**

Causes moderate eye irritation. Harmful  
if swallowed or absorbed through the  
skin. Avoid contact with skin, eyes, or  
clothing. This product may cause skin  
sensitization reactions in some people.

**Statement of Practical Treatment**  
If in eyes: Flush eyes with plenty of  
water. Get medical attention if irritation  
persists.

If swallowed: Call a physician or Poison  
Control Center. Drink 1 or 2 glasses of  
water and induce vomiting by touching  
back of throat with finger. Do not induce  
vomiting or give anything by mouth to an  
unconscious person.

If on skin: Wash with plenty of soap and  
water. Get medical attention if irritation  
persists.

**Note to Physician:** If swallowed, there is  
no specific antidote. Induce emesis or  
levage stomach. Treat symptomatically.  
Administration of an aqueous slurry of  
activated charcoal can be considered.

### Environmental Hazards

Do not apply directly to water, to areas  
where surface water is present, or to  
infrtidal areas below the mean high  
water mark. Do not contaminate water  
when disposing of equipment wash  
water or rinsate.

### Ground Water Advisory

This chemical is known to leach through  
soil into ground water under certain con-  
ditions as a result of agricultural use.  
Use of this chemical in areas where soils  
are permeable, particularly where the  
water table is shallow, may result in  
ground water contamination.

### Surface Water Advisory

Metolachlor can contaminate surface  
water through ground spray drift. Under  
some conditions, metolachlor may have  
a high potential for runoff into surface  
water (primarily via dissolution in runoff

water), for several months post-applica-  
tion. These include poorly draining or  
wet soils with readily visible slopes  
toward adjacent surface waters, fre-  
quently flooded areas, areas overlying  
extremely shallow ground water, areas  
with in-field canals or ditches that drain  
to surface water, areas not separated  
from adjacent surface waters with vege-  
tated filter strips, and areas overlying  
tile drainage systems that drain to sur-  
face water.

### Mixing/Loading Instructions

Care must be taken when using this  
product to prevent back-siphoning into  
wells, spills, or improper disposal of  
excess pesticide, spray mixtures, or  
rinsates.

Check-valves or antisiphoning devices  
must be used on all mixing and/or irri-  
gation equipment.

This product may not be mixed or loaded  
within 50 ft. of perennial or intermittent  
streams and rivers, natural or impound-  
ed lakes and reservoirs. This product  
may not be mixed/loaded or used within  
50 ft. of all wells, including abandoned  
wells, drainage wells, and sink holes".

\*For exceptions to this restriction, see  
the Environmental Hazards section of  
the Precautionary Statements in  
attached booklet.

### Aerial Drift Management Requirements

Do not apply this product by air unless  
the supplemental labeling on Aerial Drift  
Management in attached booklet is  
followed.

### Chemigation

Refer to supplemental labeling in  
attached booklet for use directions for  
chemigation. Do not apply this product  
through any irrigation system, unless the  
supplemental labeling on chemigation is  
followed.

### Container Disposal

Do not reuse empty container. Triple  
rinse (or equivalent), puncture and dis-  
pose of in a sanitary landfill, or by inci-  
eration, or by open burning, if allowed by  
state and local authorities. Keep out of  
smoke from burning containers.

This product may be stored at tempera-  
tures down to 30 degrees below 0°F.

 **NOVARTIS**