## **CLICK HERE TO JUMP TO USE DIRECTIONS**



## PLANT GROWTH REGULATOR

## For Growth Regulation of Landscape Plants & Trees

#### **ACTIVE INGREDIENT:**

Dikegulac-sodium (Sodium salt of 2,3:4,6-bis-O-	
(1-methylethylidene)-a-L-xylo-2-hexulofuranosonic acid)	18.5%
INERT INGREDIENTS:	81.5%
TOTAL	100.0%
THIS PRODUCT CONTAINS:	

1.67 lb. dikegulac-sodium per gallon or 200 grams active ingredient per liter. (1.55 lb. dikegulac acid equivalent per gallon or 17.1%)

# **KEEP OUT OF REACH OF CHILDREN** CAUTION

READ THE ENTIRE LABEL FIRST. **OBSERVE ALL PRECAUTIONS AND** FOLLOW DIRECTIONS CAREFULLY.

## PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

CAUTION: Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

#### Personal Protective Equipment (PPE)

Mixers, loaders, applicators, and other handlers must wear: long-sleeved shirt, long pants, shoes and socks. When making direct injections to trees, applicators must wear protective eyewear.

#### **User Safety Requirements**

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

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

### **User Safety Recommendations**

- · Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet. • Users should remove clothing/ PPE immediately if pesticide gets
- inside. Then wash thoroughly and put on clean clothing.
- Users should 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.

FIRST AID	
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice. (cont. on next column)</li> </ul>

lf on skin or on clothing:	Take off contaminated clothing.
	<ul> <li>Rinse skin immediately with plenty of water fo 15-20 minutes.</li> <li>Call a poison control center or doctor for treat ment advice.</li> </ul>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an uncon scious person.</li> </ul>

#### **Environmental Hazards**

For terrestrial uses: Do not apply directly to water, or to areas where water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

## 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.
- Do not apply through any type of irrigation system.
- Do not use on food or fodder crops.

## 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.

Reentry Statement: Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

## SPRAY DRIFT MANAGEMENT

Non-target terrestrial plants can be adversely affected when exposure to this product. Avoid spray drift to non-target terrestrial plants during application.

- Do not apply when wind velocity exceeds 15 mph, or when wind gusts approach 15 mph.
- . Do not apply this product if the wind direction does not favor on-target deposition.
- Use only spray equipment with medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators must use a coarser droplet size.

### ATRIMMEC IS EASY TO USE:

- Mix with water in a well rinsed sprayer. The spray solution should be used the same day it is prepared. Do not mix ATRIMMEC with fertilizers or other pesticides.
- A surfactant is incorporated in the product. No additional wetting agent is needed for foliar applications.
- · Plant foliage should be dry when spray is applied.
- On very hot, sunny days, spray preferably early in the morning or late in the afternoon.
- · Spray entire plant until wet. Thorough coverage of foliage is the key to good results.

- After spray has dried, respraying may overdose previously treated plants. Be careful to avoid overlapping treatment of plants.
- If treated plants are subject to rainfall or overhead irrigation within 6 hours after spraying, effectiveness may be reduced.
- Trimming after applying ATRIMMEC may interfere with the action of the product.

### ATRIMMEC – FOR LANDSCAPE MAINTENANCE

#### WHAT ATRIMMEC DOES:

ATRIMMEC is a growth retardant for use on hedges, shrubs, trees and groundcovers. It can also be used on certain trees and shrubs to prevent flowering and undesired (nuisance) fruit set.

ATRIMMEC is a systemic plant growth regulator applied as a foliar spray. It is absorbed by the leaves and translocated to the shoot tips. Growth retardant effect is limited to sprayed branches.

ATRIMMEC temporarily stops shoot elongation and promotes lateral branching. This reduces the need for trimming and pruning. It can also improve the appearance of landscape ornamentals by gradually filling in growth and providing a more uniform, compact shape.

## CONSIDERATIONS WHEN USING ATRIMMEC FOR LANDSCAPE MAINTENANCE:

- Looking for a formal appearance? Trim the shrub or groundcover to shape, leaving at least two pairs of expanded leaves on each shoot to absorb the spray. Apply ATRIMMEC within three days.
- Looking for a more natural appearance? Either trim only the long, wild shoots and immediately apply ATRIMMEC spray or trim shrub or groundcover to shape, allow the new shoots to grow at least two inches (5 cm.) and then apply ATRIMMEC spray.

#### **RESPONSES WITH ATRIMMEC:**

After an application of ATRIMMEC in spring, plants can usually be maintained in acceptable shape for a full season. Under extremely good growing conditions or in areas with a long growing season, two treatments per year may be considered on certain species. However, in areas with a short growing season only a single spring treatment is recommended.

Plants must be well rooted and actively growing. Do not treat wilted or dormant plants. Plants must be healthy and not under stress from drought, nutritional deficiency or disease. Avoid treating slow growing plants under cool weather conditions or extremely hot summer temperatures.

Best response is obtained on lush spring growth or under good growing conditions.

Temporary reduction or suppression of flowering may be observed in shrubs and groundcovers such as alyssum, oleander, star jasmine and gazania, but normal bloom returns 3 to 6 weeks after spraying.

Chlorosis of the growing tip and terminal growth may occur a few weeks after the spraying of some species. This is usually transient but may persist up to 6 weeks on certain shrubs such as forsythia, oleander and privet. Fully expanded foliage is not affected.

Overdosing with ATRIMMEC may result in marked chlorosis and necrotic terminal shoots. Underdosing may result in little or no growth retardant effect.

## RECOMMENDATIONS FOR GROWTH CONTROL OF LANDSCAPE ORNAMENTALS:

Suggested use rates of ATRIMMEC vary with different species (Table 1). Where a dosage range is given, use a concentration in the lower part of the indicated range for tender, sensitive varieties; use a concentration in the higher part of the suggested range for vigorous, rank-growing varieties.

Spray volume will vary with the size of plants and amount of foliage. Spray to wet. On hedges, shrubs and groundcovers one gallon of spray solution covers 400 to 600 square feet (1 liter per 10 to 15 square meters). Small trees up to 16 feet (5 meters) tall require 1 to 5 gallons (5 to 20 liters) per tree. Larger trees 20 to 30 feet (6 to 9 meters) in height will require 10 to 15 gallons (40 to 60 liters) of spray solution per tree. Thorough coverage provides the best results.

#### TABLE 1 GROWTH CONTROL OF LANDSCAPE ORNAMENTALS

CONCENTRATION OF ATRIMMEC

LANDSCAPE ORNAMENTALS	IN W	ATER
SPECIES OF ORNAMENTAL PLANT	fl. ozs. per gal.	approx. ml/liter
Arborvitae, American (Thuja occidentalis)	1	8
Abelia (Abelia x grandiflora)	1 2 to 3	8 16 to 24
Alyssum ( <i>Alyssum</i> spp.).	2 10 5	16 16
Ash, Arizona or Velvet (Fraxinus velutina)	1 to 2	8 to 16
Ash, Shamel or Evergreen Ash (Fraxinus uhdei)	1 to 2	8 to 16
Barberry ( <i>Berberis</i> spp.) Bottlebrush ( <i>Callistemon</i> spp.)	1 2 to 3	8 16 to 24
Bougainvillea ( <i>Bougainvillea</i> spp.)	2	16
Temporary suppression of flowering may be observed 3 to 6 weeks after spraying.		
Butterfly bush or Buddleia (Buddleia spp.)	1 to 2	8 to 16
Cape honeysuckle or Tecomaria (Tecomaria capensis)	2 to 3	16 to 24
Cherry-laurel and English Laurel ( <i>Prunus</i> spp.) Coprosmas ( <i>Coprosma</i> )	2 to 3 1 to 2	16 to 24 8 to 16
Cotoneaster ( <i>Cotoneaster</i> spp.).	1 to 2	8 to 16
Hawthorn, Thorn, Thorn Apple		
or Red Hawthorn ( <i>Crategus</i> spp.)	1 to 2	8 to 16
Cypress ( <i>Cupressus</i> spp.)	1 2 to 3	8 16 to 04
Elaeagnus ( <i>Elaeagnus</i> spp.)	2103	16 to 24 16
Elm, Siberian or Dwarf Elm (Ulmus pumila)	1 to 2	8 to 16
English Ivy ( <i>Hedera helix</i> )	2	16
Escallonias ( <i>Escallonia</i> spp.)Euonymus ( <i>Euonymus</i> spp.)	1 to 2	8 to 16
Euonymus ( <i>Euonymus</i> spp.)	2 to 3 2	16 to 24 16
Fig, Creeping Fig, Climbing Fig or Creeping	-	10
Rubber Plant (Ficus repens or Ficus pumila)	2 to 3	16 to 24
Fig, Laurel, Benjamin Tree or Weeping Fig ( <i>Ficus nitida</i> )	2 0 to 2	16
Firethorn ( <i>Pyracantha</i> spp.)Forsythia ( <i>Forsythia</i> spp.)	2 to 3 2	16 to 24 16
Treat only spring growth. Summer treatments may retard	2	10
flower bud set and development.		
Gazania ( <i>Gazania</i> spp.).	2	16
Hardy Orange ( <i>Poncirus trifoliata</i> ) Holly ( <i>Ilex</i> spp.)	2 2 to 3	16 16 to 24
Use 3 fluid ounces of ATRIMMEC per gallon for	2100	10 10 2 1
growth control of Yaupon holly (Ilex crenata).		
Avoid spraying Japanese holly ( <i>llex crenata</i> ) just before or during the flowering period if		
berry display is desired.		
Honeysuckle (Lonicera spp.)	3	24
Indian Hawthorn ( <i>Raphiolepis indica</i> ) Jasmine, Star Jasmine or Confederate Jasmine	2 to 3	16 to 24
(Trachelospermum jasminoides)	2	16
Juniper ( <i>Juniperus</i> spp.)	1	8
Lantana or Yellow Sage (Lantana camara)	1 to 2	8 to 16
Lippia, Creeping (Phyla nodiflora) Mulberry, White (Morus alba)	2 2	16 16
Oleander, Common Oleanderor Rosebay (Nerium oleander)	1 to 2	8 to 16
Orange Jessamine, Orange Jasmine		
or Satinwood (Murraya paniculata)	2	16
Osmanthus ( <i>Osmanthus</i> spp.) Periwinkle or Myrtle ( <i>Vinca minor</i> )	2	16 16
Photinia, Red tip ( <i>Photinia fraseri</i> )	3	24
Pittosporum, Japanese Pittosporum,		
Mock Orange, Tobira or Australian Laurel		
( <i>Pittosporum tobira</i> ) Podocarpus, Southern Yew, Japanese Yew or	2	16
Buddhist Pine ( <i>Podocarpus macrophyllus</i> )	2	16
Privet ( <i>Ligustrum</i> spp.).	1 to 2	8 to 16
Use 2 fluid ounces of ATRIMMEC per gallon on		
waxleaf privet (Ligustrum japonica "Texanum")	2 to 3	16 to 24
Viburnum ( <i>Viburnum</i> spp.)	2 to 3 1 to 2	8 to 16
Xylosma ( <i>Xylosma</i> spp.)	2 to 3	16 to 24

## **BARK BANDING OF INDIVIDUAL PLANTS:**

Bark banding of certain landscape plants can reduce or prevent undesired (nuisance) fruit formation. Make one application at the flower bud stage through the early-bloom stage, and before fruit set. Generally, applications after fruit set are ineffective for fruit suppression.

Do not apply to dormant trees, or during drought stress and during periods when trees are not actively transpiring.

Compressed air sprayers, backpack (knapsack) sprayers and other pressurized sprayers can be used

#### Spray concentration:

Mix 3 fl. oz. of ATRIMMEC plus 0.5 fl. oz. of an organo-silicant surfactant to one (1) gallon of water. Refer to the quick-mix table for additional spray preparations.

#### Table 2: Quick mix table for bark banding treatments.

Spray solution desired, gallons	Amount of ATRIMMEC, fl. oz.	Amount of surfactant, fl. oz.
1	3 fl. oz.	0.5 fl. oz.
2	6 fl. oz.	1.0 fl. oz.
3	9 fl. oz.	1.5 fl. oz.
10	30 fl. oz.	5.0 fl. oz.
100	300 fl. oz.	50 fl. oz.
Equivalent concentrations: 3 fl. oz./1 gallon = 2.3% v/v solution = 0.4% dikegulac acid equivalent or 4000 ppm dikegulac acid equivalent.		

#### Spray Volume:

The amount spray solution required for bark banding depends upon the plant diameter.

Measure the diameter of the tree trunk in inches at breast height (DBH) or at 4.5 feet from the soil. For multi-stemmed plants, add the individual diameters of each stem to determine the total diameter at breast height.

## Table 3: Approximate amounts (gallonages) of spray solution (diluted spray) for individual plant treatments are presented below:

•		
Tree diameter at breast height (DBH), inches	Width of spray band from the soil line, inches	Amount (volume) of spray solution at 2.3% v/v,
1 inch	5 inches	10 fl.oz.
2 inches	10 inches (1 foot)	20 fl.oz.
3 inches	15 inches	2 pints (0.25 gal)
4 inches	20 inches	2.5 pints
5 inches	25 inches (2 feet)	3.3 pints
6 inches	30 inches	4.0 pints (0.5 gal)
7 inches	35 inches (3 feet)	4.5 pints
8 inches	40 inches	5.0 pints
10 inches	50 inches (4 feet)	6.5 pints
12 inches	60 inches (5 feet)	8.0 pints (1 gallon)
Note: Based on 1 gallon of spr	ay solution per 12-inch trunk diar	neter at breast height (DBH).

Note: Based on 1 gallon of spray solution per 12-inch trunk diameter at breast height (DBH).

The spray solution should be applied as a circular band to the entire circumference of the tree trunk or multi-stemmed plants. Typical spray band widths from the soil line can vary from 20 to 30 inches for medium sized trees (4 to 6 inches DBH). Begin the band treatment at the upper portion of the trunk, treating downward to soil to allow the spray solution to move onto the untreated portion of the trunk. For adequate coverage, apply the proper amount (volume) of spray solution as described in Table 3.

Soil drench of individual plants for undesired (nuisance) fruit suppression: Soil drenches of certain landscape plants can reduce or prevent fruit formation. Make one soil drench at the flower bud stage through the early-bloom stage, and before fruit set. Use spray equipment capable of delivering the mixture uniformly around the base of the plant, in as close proximity of the root flares as possible.

**Drench volume and concentration:** Refer to Tables 2 and 3 of the bark banding section for the spray preparation and the amounts of spray solution needed for individual plant treatments.

**Application:** Apply the spray solution to the root zone as a band around the base of the tree or individual plant. Apply the amount (volume) listed in Table 3 in a band from the base of the tree outward for 1 to 2 feet. The soil drench should be made completely around the base of the plant. Apply the mixture over the root flares of the plant to allow the spray solution to enter the soil at the base of the plant.

## RECOMMENDATIONS FOR SUPPRESSION OF FLOWER AND FRUIT FORMATION:

ATRIMMEC spray applied prebloom or during the flowering period of certain ornamentals reduces or eliminates bloom and prevents undesired (nuisance) fruit set.

Certain landscape trees and shrubs are allergenic during bloom. Ripe fruit falling on sidewalks, streets, and parked cars present a difficult cleanup problem which can often be reduced or prevented with a single spray treatment.

The spray concentration and timing of treatments are given in Table 4 for each species of tree or shrub. ATRIMMEC treatment is generally ineffective for these purposes after fruit has begun to set. Foliar injury may occur if ATRIMMEC is applied to drought stressed trees. Treat healthy, vigorously growing trees only.

Complete spray coverage is essential for good results. See suggested spray volumes indicated for growth control of landscape ornamentals.

TABLE 4 SUPPRESSION OF FLOWER AND FRUIT FORMATION	CONCENTRATION OF ATRIMMEC IN WATER	
SPECIES OF ORNAMENTAL PLANT	fl. ozs. per gal.	approx. ml/liter
Olive, ornamental (Olea europaea) Treat at any time from prebloom period after floral rachis has elongated about 1/2 inch (1.3 cm) through early bloom. Best results are obtained in early spring during the tight bud stage of the prebloom period.	2 1/3 to 5	20 to 40
Privet, glossy ( <i>Ligustrum lucidum</i> ) Treat when flower parts have elongated 1 to 3 inches (2.5 to 7.5 cm), since subsequent vegetative growth will cover the dead floral rachis and maintain satisfactory appearance. Treatment at a later stage when flower parts are 4 to 6 inches (5 to 15 cm) leaves the dead floral parts visible for the remainder of the season.	2/3 to 1.5	5 to 12
Rose, multiflora ( <i>Rosa multiflora</i> ). Apply ATRIMMEC at any time from the prebloom period when plants are in full foliage and flower buds have formed through early bloom (10 to 15% bloom).	2/3 to 1.5	5 to 12
Holly, Japanese <i>(lex crenata)</i>	2/3 to 1.5	5 to 12

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE**: Store in original container in a locked storage area. Keep from freezing. To prevent cross contamination, do not store near other pesticides, fertilizers, seeds, food or feed.

**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). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by state and local authorities by burning. If burned stay out of smoke.

## LIMITED WARRANTY AND DISCLAIMER

**IMPORTANT:** Read this LIMITED WARRANTY AND DISCLAIMER before buying or using this product. By opening and using this product, buyer and all users agree to accept the terms of this LIMITED WARRANTY AND DISCLAIMER in their entirety and without exception. If the terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full.

It is impossible to eliminate all risks inherently associated with use of this product. Damage to the treated article, ineffectiveness, or other unintended consequences can result from use of the product under abnormal conditions such as weather, presence of other materials, or the manner of use or application, etc. Such factors and conditions are beyond the control of the manufacturer, and **BY PURCHASING AND USING THIS PRODUCT THE BUYER AND ALL USERS OF THIS PRODUCT AGREE TO ACCEPT ALL SUCH RISKS**. To the extent consistent with applicable law, buyer and all users further agree to assume all risks of loss or damage from the use of the product in any manner that is not explicitly set forth in or that is inconsistent with label instructions, warnings and cautions.

The manufacturer warrants only that this product conforms to the chemical description given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use, subject to the inherent risks described below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MER-CHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

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