



ATRIMMEC®

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%

OTHER 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 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 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 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 a poison control center or doctor for treatment advice.

(cont. on next column)

First Aid (cont.)

If on skin or on 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 treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

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.

1. Product Description

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 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.
- ATRIMMEC is a systemic plant growth regulator applied as a foliar spray that reduces or breaks apical dominance and enhances lateral branching.
- 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 is absorbed through the leaves and translocated to the shoot tips. Pinching effect is limited to sprayed branches.
- ATRIMMEC will chemically pinch unpruned shoots and will also increase branching of trimmed shoots.
- ATRIMMEC produces full, well branched plants with more abundant bloom.
- ATRIMMEC reduces the need for mechanical pinching and pruning.

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.

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.

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.

2. Foliar Sprays For Growth Regulation (shrubs, hedges, and groundcovers)

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.

Directions For Growth Control Of Landscape Ornamentals:

Directed 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 directed 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.

Species of Ornamental Plant (Common/botanical name)	Scientific name	Concentration of ATRIMMEC in Water	
		fluid ounces per gallon	mL/liter
Arborvitae, American	Thuja occidentalis	1	8
Abelia	Abelia x grandiflora	1	8
Alyssum	Alyssum spp.	2	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	Berberis spp.	1	8
Bottlebrush	Callistemon spp.	2 to 3	16 to 24
Bougainvillea Temporary suppression of flowering may be observed 3 to 6 weeks after spraying.	Bougainvillea spp.	2	16
Butterfly bush or Buddleia	Buddleia spp.	1 to 2	8 to 16
Bottlebrush	Calistemon spp.	2 to 3	16 to 24
Cape honeysuckle or Tecomaria	Tecomaria capensis	2 to 3	16 to 24
Cherry-laurel and English Laurel	Prunus spp.	2 to 3	16 to 24
Coprosmas	Coprosma	1 to 2	8 to 16
Cotoneaster	Cotoneaster spp.	1 to 2	8 to 16

(cont. on next column)

Species of Ornamental Plant (Common/botanical name)	Scientific name	Concentration of ATRIMMEC in Water	
		fluid ounces per gallon	mL/liter
Hawthorn, Thorn, Thorn Apple, or Red Hawthorn	Crataegus spp	1 to 2	8 to 16
Cypress	Cupressus spp.	1	8
Elaeagnus	Elaeagnus spp	2 to 3	16 to 24
Elm, Chinese	Ulmus parvifolia	2	16
Elm, Siberian or Dwarf Elm	Ulmus pumila	1 to 2	8 to 16
Escallonias	Escallonia spp.	1 to 2	8 to 16
Euonymus	Euonymus spp.	2 to 3	16 to 24
Eugenia	Eugenia myrtifolia	2	16
Fig, Creeping Fig, Climbing Fig or Creeping Rubber Plant	Ficus repens or Ficus pumila	2 to 3	16 to 24
Fig, Laurel, Benjamin Tree or Weeping Fig	Ficus nitida	2	16
Firethorn	Pyracantha spp.	2 to 3	16 to 24
Forsythia Treat only spring growth. Summer treatments may retard flower bud set and development.	Forsythia spp.	2	16
Gazania	Gazania spp.	2	16
Hardy Orange	Poncirus trifoliata	2	16
Algerian Ivy	Hedera canariensis	2 to 3	16 to 24
English Ivy	Hedera helix	2	16
Holly Use 3 fluid ounces of ATRIMMEC per gallon for growth control of Yaupon holly (Ilex crenata). Avoid spraying Japanese holly (Ilex crenata) just before or during the flowering period if berry display is desired.	Ilex spp.	2 to 3	16 to 24
Honeysuckle	Lonicera spp.	3	24
Jasmine, Star Jasmine or Confederate Jasmine	Trachelospermum jasminoides	2	16
Orange Jessamine, Orange Jasmine or Satinwood	Murraya paniculata	2	16
Juniper	Juniperus spp.	1	8
Lantana or Yellow Sage	Lantana camara	1 to 2	8 to 16
Lippia, Creeping	Phyla nodiflora	2	16
Mulberry, White	Morus alba	2	16
Oleander, Common Oleander or Rosebay	Nerium oleander	1 to 2	8 to 16
Osmanthus	Osmanthus spp.	2	16
Periwinkle or Myrtle	Vinca minor	2	16
Photinia, Red tip	Photinia fraseri	3	24
Pittosporum, Japanese Pittosporum, Mock Orange, Tobira or Australian Laurel	Pittosporum tobira	2	16

(cont. on next page)

Species of Ornamental Plant (Common/botanical name)	Scientific name	Concentration of ATRIMMEC in Water	
		fluid ounces per gallon	mL/liter
Podocarpus, Southern Yew, Japanese Yew or Buddhist Pine	Podocarpus macrophyllus	2	16
Privet Use 2 fluid ounces of ATRIMMEC per gallon on waxleaf privet (Ligustrum japonica 'Texanum')	Ligustrum spp.	1 to 2	8 to 16
Indian Hawthorn	Raphiolepis indica	2 to 3	16 to 24
Viburnum	Viburnum spp.	2 to 3	16 to 24
Willow	Salix spp.	1 to 2	8 to 16
Xylosma	Xylosma spp.	2 to 3	16 to 24

3. Bark Banding To Reduce Undesired (Nuisance) Fruit And Flower Formation

Bark banding of certain landscape plants can reduce or prevent undesired (nuisance) fruit formation. **IMPORTANT:** Make one application 2 to 4 weeks prior to flower buds at pinhead sized (or smaller) for optimum application timing. Applications made after flower buds have formed or flowers have opened will not be effective. Use low pressure settings. Compressed air sprayers, backpack (knapsack) sprayers and other pressurized sprayers can be used.

Spray concentration:

Mix 3 fl. oz. of ATRIMMEC plus 0.5 to 1.0 fl. oz. of a 100% organosilicone surfactant to one (1) gallon of water. Refer to the quick-mix table for additional spray preparations.

Spray mixture desired (gallons)	Add this amount of ATRIMMEC (fl. oz.)	Add this amount of 100% organosilicone surfactant (fl. oz.)
1	3 fl. oz.	0.5 to 1.0 fl. oz.
2	6 fl. oz.	1.0 to 2.0 fl. oz.
3	9 fl. oz.	1.5 to 3.0 fl. oz.
5	15 fl. oz.	2.5 to 5.0 fl. oz.
10	30 fl. oz.	5.0 to 10.0 fl. oz.
100	300 fl. oz.	50 to 100.0 fl. oz.

Note: Proportionally for each 12 inch trunk diameter at breast height (DBH) or at 4.5 feet above the soil, apply 1 gallon of spray mixture.
Equivalent concentrations: 3 fl. oz./1 gallon = 2.3% v/v solution = 0.4% dikegulac acid equivalent or 4000 ppm dikegulac acid equivalent.

Directions And Spray Amount Required For Each Tree:

1. The amount spray mixture required for bark banding depends upon the tree plant diameter.
2. Measure the diameter of the tree trunk in inches at breast height (DBH) or at 4.5 feet from the soil.
3. For multi-stemmed plants measure diameter of each stem at 4.5 feet from the soil, add the individual diameters of each stem to determine the total diameter of the tree at breast height. (Example at 4.5 feet above the soil: A three-limbed, forked tree with 7 inch diameter stem; a 5 inch diameter stem; 6 inch diameter stem = 18 inches and would require 1.5 gallons of spray mixture).
4. Apply the appropriate mixture to the tree starting at the tree trunk and lower limbs and apply down to the soil line. Larger trees require applications to upper tree trunk and lower limbs and apply down to the soil line.
5. Use low spray pressure. Apply with a technique, pressure setting and nozzle setting that maximizes the retention of the mixture on the trunk.
6. The spray mixture should be applied as a circular band to the entire circumference of the tree trunk or multi-stemmed plants.
7. Be sure to apply the entire appropriate mixture to each tree.
8. Include spray applications to the tree root flares. Excess spray may accumulate at the soil line.
9. For optimum plant translocation (uptake and upward movement), apply when daytime temperatures are expected to be 60°F or above for several days after application.
10. Do not apply to dormant trees, or during drought stress and during periods when trees are not actively transpiring.

Tree diameter at 4.5 feet from soil or breast height (DBH), inches	Amount (volume) of spray mixture see Table 2
6 inches	0.5 gallon
12 inches	1 gallon
18 inches	1.5 gallon
24 inches	2.0 gallon

Note: Proportionally for each 12 inch trunk diameter at breast height (DBH) or at 4.5 feet above the soil, apply 1 gallon of spray mixture.

4. Soil Drenching To Reduce Undesired (Nuisance) Fruit And Flower Formation

Soil drenches of certain landscape plants can reduce or prevent fruit formation. **IMPORTANT:** Make one application 2 to 4 weeks prior to flower buds at pinhead sized (or smaller) for optimum application timing. Applications made after flower buds have formed or flowers have opened will not be effective.

Use equipment capable of delivering the drench mixture uniformly around the base of the plant, in as close proximity in a band around the plant at the soil-to-trunk interface and root flares as possible.

Drench concentration:

Mix 3 fl. oz. of ATRIMMEC plus 0.5 to 1.0 fl. oz. of a 100% organosilicone surfactant to one (1) gallon of water. Refer to the quick-mix table for additional drench mixtures.

Spray mixture desired (gallons)	Add this amount of ATRIMMEC (fl. oz.)	Add this amount of 100% organosilicone surfactant (fl. oz.)
1	3 fl. oz.	0.5 – 1.0 fl. oz.
2	6 fl. oz.	1.0 – 2.0 fl. oz.
3	9 fl. oz.	1.5 – 3.0 fl. oz.
5	15 fl. oz.	2.5 – 5.0 fl. oz.
10	30 fl. oz.	5.0 – 10.0 fl. oz.
100	300 fl. oz.	50 – 100 fl. oz.

Note: Proportionally for each 12 inch trunk diameter at breast height (DBH) or at 4.5 feet above the soil, apply 1 gallon of spray mixture.

Directions And Drench Amount Required For Each Plant:

1. The amount drench mixture required for soil drench depends upon the plant diameter.
2. Measure the diameter of the plant in inches at breast height (DBH) or at 4.5 feet from the soil.
3. For multi-stemmed plants measure diameter of each stem at 4.5 feet from the soil, add the individual diameters of each stem to determine the total diameter of the tree at breast height. (Example at 4.5 feet above the soil: A three-limbed, forked plant with 7 inch diameter stem; a 5 inch diameter stem; 6 inch diameter stem = 18 inches and would require 1.5 gallons of spray mixture).
4. Apply the spray mixture to the root zone as a band around the base of the tree or individual plant.
5. Apply the amount (volume) listed in Table 5 in a band around the plant at the soil-to-trunk interface and root flares.
6. The soil drench should be made completely around the base of the plant and all root flares.
7. Apply slowly to allow the drench mixture to enter the soil at the base of the plant and all root flares.
8. Be sure to apply the entire appropriate mixture to each tree.
9. For optimum plant translocation (uptake and upward movement), apply when daytime temperatures are expected to be 60°F or above for several days after application.
10. Do not apply to dormant plants, or during drought stress and during periods when trees are not actively transpiring.

Tree diameter at 4.5 feet from soil or breast height (DBH), inches	Amount (volume) of spray mixture see Table 4
6 inches	0.5 gallon
12 inches	1 gallon
18 inches	1.5 gallon
24 inches	2.0 gallon

Note: Proportionally for each 12 inch trunk diameter at breast height (DBH) or at 4.5 feet above the soil, apply 1 gallon of spray mixture.

5. Foliar Sprays To Reduce Undesired (Nuisance) Fruit And Flower 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 6 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 directed spray volumes indicated for growth control of landscape ornamentals.

Table 6. Suppression of Flower and Fruit Formation.		
Species of Ornamental Plant	Concentration of ATRIMMEC in Water	
	fluid ounces per gallon	approximate 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.	2½ to 5	20 to 40
Privet, glossy (Ligustrum lucidum) 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.	¾ to 1.5	5 to 12
Rose, multiflora (Rosa multiflora) 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).	¾ to 1.5	5 to 12
Holly Japanese (Ilex crenata) To prevent berry set apply at any time from prebloom, tight bud stage through midbloom.	¾ to 1.5	5 to 12

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container in a locked storage area. Keep from freezing.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available, 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.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

OR

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

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 MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED.**

THE EXCLUSIVE REMEDY OF BUYER AND ALL USERS OF THIS PRODUCT, AND THE EXCLUSIVE LIABILITY OF THE MANUFACTURER, FOR ANY AND ALL LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

The Manufacturer must be promptly notified in writing of any claims, whether based in contract, tort, negligence, strict liability, or otherwise, to be eligible to receive either remedy stated above.

The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere. No employee or agent of the manufacturer or seller is authorized to vary or exceed the terms of this Limited Warranty and Disclaimer in any manner.

ATRIMMEC® is a registered trademark of PBI-Gordon Corporation.

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EPA REG. NO. 2217-776



An Employee-Owned Company
MANUFACTURED BY
PBI/GORDON CORPORATION
1217 WEST 12TH STREET
KANSAS CITY, MISSOURI 64101
www.pbigordon.com

ATTENTION: This specimen label is provided for informational use only. This pesticide product may not yet be available for sale in your state or area. The information found in this label may differ from the information found on the product label you are using. Always follow the instructions for use and precautions on the label of the pesticide you are using.

Material Safety Data Sheet

Product Name: Gordon's Professional Turf and Ornamental Products
ATRIMMEC Plant Growth Regulator

MSDS No.: 662-6

Version No.: 017

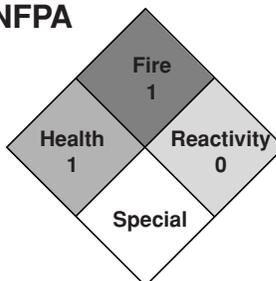
EPA Registration No.: 2217-776

1. Basic Information:

Manufacturer: PBI/Gordon Corporation
Address: 1217 West 12th Street
City, State, Zip: Kansas City, MO 64101
Contact: Environmental, Health & Safety Dept.
Information Telephone Number: (816) 421-4070
Emergency Contact: Chemtrec
Emergency Telephone Number: (800) 424-9300
Last Update: 10/02/2000

Chemical State: Liquid Gas Solid
Chemical Type: Pure Mixture

NFPA



1	Health
1	Flammability
0	Reactivity
B	Pers. Protection

2. Ingredients:

Trade Secret

CAS No.	Chemical Name	% Range	EHS	NTP	IARC	SUB Z	SARA 313	OSHA PEL	ACGIH TLV	Other Limits
52508357	2,3,4,6-Bis-O-(1-methylethylidene)-alpha-L-xylo-2-hexulofuranosonic acid, sodium salt (Dikegulac sodium)	18.5	N	N	N	N	N	NI	NI	NI

3. Hazardous Identification:

Hazard Category:

Acute Chronic Fire Pressure Reactive

Hazardous Identification Information:

Light blue liquid; no distinguishable odor.
Irritant.

4. First Aid Measures:

Route(s) of Entry:

Contact, Inhalation.

Health Hazards (Acute and Chronic):

EYES: Contact may cause irritation and/or burning.

SKIN: Contact may cause irritation.

INHALATION: May irritate respiratory system.

INGESTION: May irritate gastrointestinal system.

Signs and Symptoms: NI

Medical Conditions Generally Aggravated by Exposure: NI

Emergency and First Aid Procedures:

EYES: Flush eyes with clean water for 10-15 minutes holding lids open. If irritation persists, seek medical attention.

SKIN: Bathe and shampoo with soap and water to remove chemicals from skin and hair. Launder contaminated clothes separately prior to reuse. If irritation persists, seek medical attention.

INHALATION: Remove victim to fresh air. Apply artificial respiration if needed. If irritation persists, seek medical attention.

INGESTION: Call a physician or Poison Control Center.

Other Health Warnings: NI

5. Fire Fighting Measures:

Flash Point: 111°F

Lower Explosive Limit: NI

Upper Explosive Limit: NI

F.P. Method:

Fire Extinguishing Media:

Foam, CO₂, dry chemical, water, as appropriate for fire in surrounding materials. The low flash point of this product is due to a minor component in the mixture. Based on independent laboratory testing of similar products, this product would not sustain combustion as specified in DOT Regulation 49 CFR 173 Appendix H, and, therefore, would not be classified as a combustible liquid.

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus.

Unusual Fire and Explosion:

Runoff from fire control may pollute surface water. If pollution occurs, call local authorities.

6. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

See Section 8 for Personal Protective Equipment. Do not touch spilled product. Contain and collect spilled material with inert absorbent; place in drums for disposal. Cover and label the drums. Wash area with water, if possible.

7. Handling and Storage:

Precautions to be Taken:

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

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.

Other Precautions: NI

8. Exposure Controls/Personal Protection:

Ventilation Requirements:

Mechanical ventilation is recommended if product is applied in an enclosed area. Good local ventilation is required.

Personal Protective Equipment:

Personal Protective Equipment (PPE): Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, and 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.

RESPIRATORY PROTECTION: If exposure limits may be exceeded, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

9. Physical and Chemical Properties:

Boiling Point: 212°F

Melting Point: NI

Evaporation Rate: >1

Evaporation Rate (Butyl Acetate = 1): >1

Vapor Pressure (mm Hg.): <17@20°C

Specific Gravity (H₂O = 1): 1.09510

Vapor Density (AIR = 1): <1

Solubility in Water: Soluble.

Appearance and Odor: Light blue liquid; no odor.

Other Information: pH: 9.5

Density: 9.12 pounds/gallon @ 20°C

Viscosity: 5 cp @ 25°C

10. Stability and Reactivity:

Stability:

Stable.

Incompatibility (Materials to Avoid):

None known.

Decomposition/By-Products:

None known.

Hazardous Polymerization:

Will not occur.

11. Toxicological Information:

Dermal LD50: >1000 mg/kg body weight.

Inhalation LC50 (4H): 25.24 mg/L (male rats); 27.92 mg/L (female rats)

Oral LD50: >5000 mg/kg body weight.

12. Ecological Information:

For terrestrial uses, 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 contaminate water when disposing of equipment washwaters.

13. Disposal Considerations:

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 incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

14. Transport Information:

The following guidelines apply for domestic ground transport. If shipping by air or ocean, please contact our Transportation Dept.

Freight Class: Inhibitors, Modifiers, or Regulators, Plant Growth - NMFC #101685

In our current available sizes, this product does not qualify as a Hazardous Material.

15. Regulatory Information:

OSHA STATUS: This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS: This product is exempt from TSCA Regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA REPORTABLE QUANTITY: None

SARA TITLE III:

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None

SECTION 311/312 HAZARD CATEGORIES: Immediate Health Hazard

SECTION 313 TOXIC CHEMICALS: None

RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

16. Other Information:

REASON FOR ISSUE: To revise MSDS to the ANSI Z400.1-1998 format

NOTE: NI means not indicated.

The information and statements in this Material Safety Data Sheet are believed to accurately reflect the scientific evidence used in making the hazard determination, but is not to be construed as a warranty or representation for which we assume legal responsibility. Additional information may be necessary or desirable depending on particular, exceptional or variable conditions or circumstances of use or storage or because of locally applicable laws or government regulations. Therefore, you should use this information only as a supplement to other information available to you and must make independent determinations of the suitability of the information for your particular circumstances or conditions and of the completeness of the information available from all sources to assure both the proper use of the material described herein and the safety and health of employees.