

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

September 6, 2019

Catherine Rice Product Registration Manager FMC Corporation 2929 Walnut Street Philadelphia, PA 19104

Subject: Registration Review Label Mitigation for Prodiamine and Sulfentrazone

Product Name: Echelon 0.16% Granular Herbicide on Fertilizer

EPA Registration Number: 279-3325 Application Date: August 7, 2019 Decision Number: 553981; 553988

Dear Ms. Rice:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Prodiamine and Sulfentrazone Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Jaclyn Pyne by phone at 703-347-0445, or via email at <a href="mailto:pyne.jaclyn@epa.gov">pyne.jaclyn@epa.gov</a>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

PRODIAMINE	GROUP	3	HERBICIDE
SULFENTRAZONE	GROUP	14	HERBICIDE

## **ECHELON®**

## 0.16% Granular Herbicide on Fertilizer

For Preemergence and early postemergence Control of Crabgrass, selected annual grasses, sedges and annual broadleaf weeds in Turf Sites - Residential and Institutional Lawns, Athletic Fields, Commercial Sod Farms, Golf Course Fairways and Roughs, Roadsides, Utility right-of-ways, Railways and Industrial areas

Active Ingredients:	By Wt.
Sulfentrazone	0.053%
Prodiamine	0.107%
Other Ingredients:	99.840%
Total:	100.0%

This product contains 0.0016 pounds of active ingredient (0.00053 lb ai sulfentrazone and 0.00107 lb ai prodiamine) per pound of product

**Guaranteed Analysis XX-X-XX** 

# KEEP OUT OF REACH OF CHILDREN CAUTION

See additional precautionary information contained inside label booklet.

FMC Corporation 2929 Walnut Street Philadelphia PA 19104

EPA Reg. No. 279-3325 EPA Est. 279-

**Net Contents** 

ACCEPTED

Sep 06, 2019

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under

EPA Reg. No. 279-3325

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	FIRST AID	
IF INHALED	Move person to fresh air.	
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.	
	Call a poison control center or doctor for further treatment advice.	
IF ON SKIN	Take off contaminated clothing.	
OR	Rinse skin immediately with plenty of water for 15-20 minutes.	
CLOTHING	Call a poison control center or doctor for treatment advice.	
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15-20 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	Call a poison control center or doctor immediately for treatment advice.	
SWALLOWED	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.	
HOTLINE NUMBER		
	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-331-3148 for emergency medical treatment information.

For Information Regarding the Use of this Product Call 1-800-321-1FMC(1362)

## PRECAUTIONARY STATEMENTS

## Hazards to Humans and Domestic Animals CAUTION

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin. Avoid breathing dust. Do not get on skin, in eyes or on clothing. Prolonged or frequently repeated skin contact while mixing or handling may cause allergic reactions in certain individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

## Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeves and long pants
- Chemical-resistant gloves (gloves have a thickness of 14 mills or greater and include glove types such as Laminate, Butyl Rubber, Nitrile rubber, Neoprene, Natural Rubber, Polyethylene, PVC, or Viton)
- Shoes plus socks.

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

## User Safety Recommendations:

 Users should remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing.

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### **Environmental Hazards**

This product is toxic to marine/estuarine invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to plants and aquatic organisms in adjacent areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

Non-Target Organism Advisory Statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

<u>Groundwater advisory</u>: Sulfentrazone is known to leach through soil into groundwater under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Do not use on coarse soils classified as sand which have less than 1% organic matter.

<u>Surface water advisory:</u> Sulfentrazone can contaminate surface water through spray drift. Under some conditions, sulfentrazone may also have a high potential for runoff into surface water (primarily via dissolution in runoff water), for several to many months post-application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlying extremely shallow groundwater, 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 over-lying tile drainage systems that drain to surface waters.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

### USE RESTRICTIONS

This product may only be used in accordance with the Application Rates listed on this label.

Do not apply this product through any type of irrigation system. 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.

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## 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. These requirements only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls over long sleeves and long pants, chemical-resistant gloves made of any waterproof material, and 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.

Re-entry Statement: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment area until dust has settled.

## WEED RESISTANCE-MANAGEMENT

For resistance management, please note that Echelon 0.16% Granular Herbicide on Fertilizer contains both a Group 3/[Prodiamine] and a Group 14/ [Sulfentrazone] herbicide. Any weed population may contain plants naturally resistant to Group 3 and/or Group 14 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same area. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 3 and/or 14 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is

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- available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or pest control advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and that considers mechanical control methods, cultural (e.g., timing to favor the turf and not the weeds), biological (weed-competitive varieties) and other management practices.
- Scout area before herbicide application for weed identification and growth stage.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method. Prevent movement of resistant weed seeds to other areas by cleaning equipment.
- If a weed pest population continues to progress after treatment with this
  product, discontinue use of this product, and switch to another
  management strategy or herbicide with a different mode of action, if
  available.

Contact your local extension specialist or university researchers for additional pesticide resistance-management and/or integrated weed-management recommendations for specific types of turf and weed biotypes.

### GENERAL INFORMATION

Echelon 0.16% Granular Herbicide on Fertilizer is a granular herbicide on fertilizer carrier formulation containing 0.16 pounds of active ingredient per pound of formulated product. The mode of action of this product involves uptake by both weed roots and shoots of existing weeds and prevention of growth by newly emerged weed seedlings.

This product is a selective pre-emergence and post-emergence herbicide for control of crabgrass, annual grass and broadleaf weeds and sedges in turf sites including residential and institutional lawns, athletic fields, commercial sod farms, golf course fairways and roughs, roadsides, utility right-of-ways, railways and industrial areas.

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## SPECIFIC USE INSTRUCTIONS IN TURFGRASS FOR USE

### **Established Turf**

This product may be used on seeded, sodded or sprigged turfgrasses that are well established. First application of this product can be made following the second mowing providing the grass has developed into a uniform stand with a good root system. Turf injury may result from application of this product on turf that is not well established or has been weakened by stresses such as unfavorable weather conditions, disease, chemical or mechanical influences.

Broadcast this product with suitable application equipment to ensure uniform coverage over the treatment area. A drop or rotary spreader designed to apply granular herbicide or insecticide is the preferred application of this product. Calibrate application equipment prior to application. Consult manufacturer operation manual for proper calibration and operation of application equipment.

Echelon 0.16% Granular Herbicide on Fertilizer application may cause temporary discoloration to exposed leaf surfaces on certain cultivars of zoysiagrass. Treated turfgrass will recover with new growth. Discolored leaf tissue will be removed with mowing. To reduce potential for discoloration, do not apply this product on turfgrass that is weakened by weather, mechanical, chemical, disease or other related stress. Maintain proper cultural practices such as adequate moisture and fertility levels to promote healthy turf growth.

Echelon 0.16% Granular Herbicide on Fertilizer has demonstrated tolerance on both cool and warm season turfgrasses. However, not all varieties and or cultivars have been evaluated. Turfgrass managers desiring to treat newly released varieties should first apply this product to a small area prior to treatment of larger areas.

## **Application Rates**

When applied as directed under the conditions described, single use application rates range from 0.250 to 1.125 lb ai/acre (157 to 700 lb product/acre or 3.6 to 16.1 lb product/1,000 sq ft). The maximum application rate is 1.125 lb ai product/acre (700 lb product /acre) per calendar year.

Refer to Table 1 for the recommended range for each grass type.

Table 1. Application Rates for Tolerant grasses

Grass Type	Recommended Use Rates Do not exceed maximum use rates per turf species in a single application		
Cool Season Grasses	lh ai / acre		lb product / acre
Bentgrass, creeping <sup>1</sup> Fescue, fine <sup>2</sup> (Festuca rubra) Ryegrass, perennial (Lolium perenne)	0.25-0.3753	3.60 - 5.40	157 – 235

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Bluegrass, Kentucky ( <i>Poa pratensis</i> ) Fescue, tall <sup>2</sup> ( <i>Festuca arundinacea</i> )	0.57-0.753	8.15 – 10.80	355 - 470
Sequential Application for Mixed (	Sequential Application for Mixed Cool Season		
Turf/Cool Season Blends consisting of:			
Fescue, fine <sup>2</sup> (Festuca rubra),	Initial application	Initial application	Initial application 235
Ryegrass, perennial (Lolium	0.375	5.40	
perenne),	Follow-up application	Follow-up application	Follow-up application
Bluegrass, Kentucky (Poa pratensis)	0.25 - 0.375	3.60 - 5.40	157 - 235
Fescue, tall <sup>2</sup> (Festuca arundinacea)	30-60 days later	30- 60 days later	30 – 60 days later
		lb product /	lb product /
Warm Season Grasses	lb ai / acre	1,000 sq ft	acre
Bahiagrass (Paspalum notatum)			
Buffalograss (Buchloe dactyloides)			
Carpetgrass (Axonopus affinis)			
Centipedegrass (Eremochloa			
ophuiroides)	0.57.0.753	0.45 40.00	055 470
ophuiroides) Kikuyugrass (Pennisetum	0.57-0.75 <sup>3</sup>	8.15 – 10.80	355 - 470
Kikuyugrass (Pennisetum	0.57-0.75 <sup>3</sup>	8.15 – 10.80	355 - 470
Kikuyugrass (Pennisetum clandestinum)	0.57-0.75 <sup>3</sup>	8.15 – 10.80	355 - 470
Kikuyugrass <i>(Pennisetum clandestinum)</i> Seashore Paspalum (Paspalum	0.57-0.75 <sup>3</sup>	8.15 – 10.80	355 - 470
Kikuyugrass (Pennisetum clandestinum) Seashore Paspalum (Paspalum vaginatum)	0.57-0.75 <sup>3</sup>	8.15 – 10.80	355 - 470
Kikuyugrass (Pennisetum clandestinum) Seashore Paspalum (Paspalum vaginatum) Zoysiagrass (Zoysia japonica)			
Kikuyugrass (Pennisetum clandestinum) Seashore Paspalum (Paspalum vaginatum)	0.57-0.75 <sup>3</sup> 0.75-1.125 <sup>3</sup>	8.15 – 10.80 10.80 – 16.10	355 - 470 470 - 700

<sup>1</sup> If bentgrass is mowed lower than 0.5 inches do not apply this product.

## Table 1A. Applications for St. Augustinegrass

- Application of this product to St. Augustinegrass may cause temporary discoloration to exposed leaf surfaces of St. Augustinegrass. Treated turfgrass will recover with new growth and discolored leaf tissue will be removed with mowing.
- Do not apply this product to St. Augustinegrass if temporary discoloration cannot be accepted.

Warm Season Grass	lb ai /acre	lb product /	Ib product / acre
		1,000 sq ft	
St. Augustine	Initial application	Initial application	Initial application
	0.57	8.15	355
	Follow-up application	Follow-up application	Follow-up application
	0.57	8.15	355
	45 - 60 days later	45- 60 days later	45 – 60 days later

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<sup>2</sup> Use of this product on certain varieties of Chewing Fine Fescue or Tall Fescue cultivars may result in undesirable injury.

<sup>3</sup> This product may be applied more than once per year if needed as long as total amount applied does not exceed the maximum application rate per turf type or 1.125 lb ai/acre (700 lb product/acre), whichever is lower.

## Preemergence Control of Annual, Biennial & Perennial Broadleaf Weeds and sedges

This product, applied alone or in recommended tank mixtures, will provide control of the following weeds for pre-emergence applications.

**Table 2. Weed Controlled with Preemergence Application** 

Common Name	Scientific Name	
Barnyardgrass	(Echinochloa crus-galli)	
Bluegrass annual <sup>1</sup>	(Poa annua)	
Carpetweed	(Mollugo verticillata)	
Carolina Geranium	Geranium carolinianum	
Chickweed, common <sup>2</sup>	(Stellaria media)	
Chickweed,mousear (from seed)	(Cerastium vulgatum)	
Crabgrass (large, Smooth) <sup>3</sup>	(Digitaria spp.)	
Crowfootgrass	(Dactyloctenium aegyptium.)	
Cupgrass, Woolly	(Eriochloa villosa)	
Foxtails, Annual	(Setaria spp.)	
Goosegrass <sup>4</sup>	(Eleusine indica)	
Hairy Bittercress	Cardamine hirsute	
Henbit <sup>2</sup>	(Lamium amplexicaule )	
Itchgrass	(Rottboellia exaltata)	
Knotweed, prostrate	(Polygonum aviculare)	
Kochia	(Kochia scoparia)	
Kyllinga, green	(Kyllinga brevifolia)	
Kyllinga, false	(Kyllinga gracillima)	
Lambsquarters, common	(Chenopodium album)	
Lovegrass	(Eragrostis spp.)	
Nutsedge, yellow	(Cyperus esculentus)	
Pancium (Texas,Fall)	(Panicum spp.)	
Pigweed, Redroot	(Amaranthus retroflexus)	
Purslane, Common	(Portulaca oleracea)	
Pusley, Florida	(Richardia scabra L.)	
Sedge, globe	(Cyperus globulosus)	
Sedge, cylindrical	(Cyperus retrorsus)	
Sedge, Surinam	(Cyperus surinamensis)	
Sedge, Texas	(Cyperus polystachyos)	
Shephardspurse <sup>2</sup>	(Capsella bursa-pastoris)	
Signalgrass, broadleaf	(Brachiaria playphylla)	
Speedwell	(Veronica spp.)	
Sprangletop	(Leptochola spp.)	
Spurge, prostrate	(Euphorbia humistrata)	
<del></del>	(Panicum capillare L.)	
Witchgrass	(1 amount capital C E.)	

local Cooperative Extension Service for more specific applications timings for your local area since August and September are approximate timings.

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<sup>2.</sup> Apply this product in late summer, fall or winter before weed germinates for control.

- 3. <u>Crabgrass control in cool season grasses from fall application:</u> Areas where the ground is subject to winter freezes, this product may be applied in the fall at rates listed in Table 1 (157 470 lb product per acre) for cool season grasses when soil temperatures are below 50°F, but prior to the ground freezing. This will provide control of crabgrass the following spring.
- 4. In areas of extended growing season and heavy pressure weed control will be enhanced by second application of this product 60-90 days after initial application.

## Postemergence Control of Annual, Biennial & Perennial Broadleaf Weeds and sedges

This product, applied alone or in recommended tank mixture, will provide control of the following weeds for post emergence applications.

Table 3. Weeds Controlled or Suppressed When Application Made Postemergence to Weeds

Common Name	Scientific Name	Controlled	Suppressed
Bittercress	(Cardamine spp.)		X
Black medic	(Medicago lupulina)		X
Buttercups	(Ranunculus spp.)		X
Carolina geranium	(Geranium carolinianum)	1	
Carpetweed	(Mollugo verticillata)		Х
Chickweed, common	(Stellaria media)	1	
Chickweed, mousear	(Cerastium vulgatum)		X
Cinquefoil	(Potentilla spp.)		X
Clover	(Trifolium spp.)		X
Crabgrass (Large and Smooth)	(Digitaria spp.)	2	
Cudweed	(Gnaphalium spp.)		Х
Dandelion	(Taraxacum officinale)		Х
Dock, Curly	(Rumex crispus)		Х
Evening primrose	(Oenothera biennis)		Х
Fiddleneck	(Amsinckia spp.)		X
Filaree	(Erodium spp.)		Х
Goldenrod	(Solidago spp.)	1	
Goosegrass	(Eleusine indica)	2	
Ground ivy	(Glechema hederacea)	1	
Henbit	(Lamium amplexicaule)		X
Knotweed, prostrate	(Polygonum aviculare)		X
Kochia	(Kochia scoparia)	1	
Lambsquarters, common	(Chenopodium album)		Х
Lawn burweed	(Soliva pterosperma)		X
Lespedeza, common	(Lespedeza striata)		X
Mallow, common	(Malva neglecta)		Х
Nutsedge, Yellow	(Cyperus esculentus)	С	
Parsley piert	(Alchemilla arvensis)	1	
Pigweed, Redroot	(Amaranthus retroflexus)	1	
Pigweed, Tumble	(Amaranthus albus)	1	
Pineapple weed	(Matricaria matricarioides)		Х
Plantain, buckhorn	(Plantago lanceolata)	1	
Puncture weed	(Tribulus terrestris)		Х
Purslane, common	(Portulaca oleracea)		Х
Pusley, Florida	(Richardia scabra)	1	

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Redweed	(Melochia corchorifolia)		X
Rocket, London	(Sisymbrium irio)		Х
Smartweed, Pennsylvania	(Polygonum pensylvanicum)	1	
Sorrel, Red	(Rumex acetosella)		X
Speedwell	(Veronica spp.)	1	
Spurge, (annuals)	(Euphorbia spp.)	1	
Spurge, prostrate	(Euphorbia humistrata)	1	
Spurge, spotted	(Euphorbia maculata)	1	
Star of Bethlehem	(Ornithogalum umbellatum)	1	
Velvetleaf	(Abutilon theophrasti)		Х
Violet, wild	(Viola pratincola)		Х
Wild garlic	(Allium vineale)		Х
Wild onion	(Allium canadense)		Х
Woodsorrel, creeping	(Oxalis corniculata)		Х
Woodsorrel, yellow	(Oxalis stricta)	1	

<sup>1.</sup> Weeds are suppressed at lower label rates (<470 lb product per acre). For optimum control apply rates of at least 470 lb product per acre in a single application. Do not exceed the application rate specified for the turf species in Table 1.

## Application to Reseeded, Overseeded or Sprigged areas

Reseeding, overseeding or sprigging of treated areas within three to twelve (3-12) months after application of this product could inhibit the establishment of desirable grasses. [See table for exact intervals from application].

Best results are obtained for reseeding or overseeding when mechanical or power seeding equipment (slit seeders) are used to give good seed to soil contact and proper soil cultivation, irrigation and fertilization practices are followed.

Table 4. Overseeding Intervals after Product Applications

<b>Total Amount of Product Applied</b>	Interval (Months Before Overseeding)		
lb product / acre	North	Transition	South
83 - 125	3	3	3
190 – 250	4	4	4
375	6	5	5

### Sod Production

It is recommended that sod be established for at least four (4) months before an application of this product.

Do not apply this product within three (3) months of harvest.

### Other Use Precautions

Do not apply to golf course putting greens or tees.

Do not use on turgrasses other than those listed on this label.

Do not graze or feed livestock forage cut from areas treated with this product.

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<sup>2.</sup> This product controls crabgrass and goosegrass when applied postemergent to newly emerged weeds in the 1-4 leaf stage of development.

Do not apply directly to landscape ornamental foliage or ornamental beds containing dormant bulbs or non-woody perennials.

Do not apply to areas where dichondra, colonial bentgrass, velvet bentgrass or annual bluegrass (*Poa annua*) are *desirable* species.

Do not apply to creeping bentgrass if mowing height is less than 0.5 inch.

Do not harvest treated sod before 90 days after application.

Do not apply to newly set sod until the sod has rooted and exposed edges have grown in.

## **ADDITIONAL USE INSTRUCTIONS**

## Railroad Rights-of-Way

Controls many weeds and maintains bare ground on railroad rights-of-way, including railroad yards, railroad crossings and railroad bridge abutments.

## Highway, Roadside, Pipeline and Utility Rights-of-Way

Controls many weeds and maintains bare ground in highway, roadside, pipeline and utility rights-of-way. Such areas would include, but are not limited to, guardrails, road shoulders, electric utility substations, pipeline pumping stations, around electric transmission towers, around distribution line poles plus other areas where complete vegetation control is desired.

## Industrial Areas, Fence Rows and Other Non-crop Sites

Controls weeds and maintains bare ground in industrial areas including production facilities, tank farms, storage areas, parking areas, lumber yards, airports, military installations, along fence rows, and in similar non-crop sites where complete vegetation control is needed.

## METHOD AND RATE OF APPLICATION FOR ADDITIONAL USES

For residual control of germinating weeds in non-crop land, apply as a broadcast treatment using 470 - 700 lb product (0.75 - 1.125 lb ai) per acre by ground in a suitable granular applicator.

DO NOT apply this product to soils classified as sand with less than 1% Organic Matter.

## Timing

For best results, apply this product alone or in combination with other herbicides for residual control of weeds in late summer, fall, or early spring to insure adequate moisture for soil activation.

## **Weeds Controlled**

Echelon 0.16% Granular Herbicide on Fertilizer when applied postemergence at 470 - 700 lb product per acre, will control the following weeds in non-cropland areas (Table 5). Use the higher labeled rates to extend length of control. Use the higher rates on sites with fine soil textures and on sites with more than 2% organic matter.

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Table 5. Weeds Controlled from Preemergence Application to Bare Ground Prior to Weed Seed Germination

Common Name	Scientific Name
Barnyardgrass	(Echinochloa crus-galli)
Bluegrass annual	(Poa annua)
Carpetweed	(Mollugo verticillata)
Carolina Geranium	Geranium carolinianum
Chickweed, common	(Stellaria media)
Chickweed,mousear (from seed)	(Cerastium vulgatum)
Crabgrass (large, Smooth)	(Digitaria spp.)
Crowfootgrass	(Dactyloctenium aegyptium)
Cupgrass, Woolly	(Eriochloa villosa)
Foxtails, Annual	(Setaria spp.)
Goosegrass	(Eleusine indica)
Hairy Bittercress	Cardamine hirsuta
Henbit	(Lamium amplexicaule)
Itchgrass	(Rottboellia exaltata)
Knotweed, prostrate	(Polygonum aviculare)
Kochia	(Kochia scoparia)
Kyllinga, green	(Kyllinga brevifolia)
Kyllinga, false green	(Kylinga gracilima)
Lambsquarters, common	(Chenopodium album)
Lovegrass	(Eragrostis spp.)
Nutsedge, yellow	(Cyperus esculentus)
Nutsedge, purple	(Cyperus rotundus)
Pancium (Texas,Fall)	(Panicum spp.)
Pigweed, Redroot	(Amaranthus retroflexus)
Purslane, Common	(Portulaca oleracea)
Pusley, Florida	(Richardia scabra L.)
Sedge, globe	(Cyperus globulosus)
Sedge, cylindrical	(Cyperus retrorsus)
Sedge, Surinam	(Cyperus surinamensis)
Sedge, Texas	(Cyperus polystachyos)
Shephardspurse	(Capsella bursa-pastoris)
Signalgrass, broadleaf	(Brachiaria playphylla)
Speedwell	(Veronica spp.)
Sprangletop	(Leptochola spp.)
Spurge, prostrate	(Euphorbia humistrata)
Witchgrass	(Panicum capillare L.)
Woodsorrel, yellow (from Seed)	(Oxalis stricta)

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## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store product in original container only, away from other pesticides, fertilizer, food or feed. Reseal open bag by folding top down and securing. Store in a cool, dry place and avoid excess heat.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call CHEMTREC (Transportation and spills): (800) 424-9300.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**Pesticide Disposal:** If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional office for guidance.

## Container Handling:

Paper and Plastic Bags: Non-refillable. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available, or dispose of empty bag in a sanitary landfill or by incineration, or by burning. Do not burn unless allowed by state or local authorities. If burned, stay out of smoke.

## CONDITIONS OF SALES AND LIMITATIONS OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions beyond the control or FMC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold FMC and Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the Directions for Use when used in accordance with the directions under normal conditions of use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, FMC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, NOR ANY OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE SELECTION, PURCHASE, OR USE OF THIS PRODUCT. Any warranties, express or implied, having been made are inapplicable if this product has been used contrary to label instructions, or under abnormal conditions, or under conditions not

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reasonably foreseeable to (or beyond the control of) seller or FMC, and buyer assumes the risk of any such use.

To the extent consistent with applicable law, FMC or seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF FMC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF FMC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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