

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 23, 2019

Lisa Nichols Registrations Manager Loveland Products, Inc. P.O. Box 1286 Greeley, CO 80632-1286

Subject: Registration Review Label Mitigation for Pendimethalin Product Name: Pendimethalin 0.86% on Fertilizer EPA Registration Number: 34704-832 Application Dates: August 20, 2019 Decision Numbers: 557274

Dear Ms. Nichols:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Pendimethalin Interim Decision, 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 pyne.jaclyn@epa.gov.

Sincerely,

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

Enclosure

Pendimethalin 0.86 on Fertilizer

Pre-emergence weed control with quality turf nutrients for golf courses, sod farms, municipal, federal and corporate parks, landscapes, and cemeteries. Recommended for use by turf management firms or grounds maintenance personnel on commercial, ornamental, recreational turf and residential lawns.

Controls Crabgrass, Chickweed, Foxtail, Goosegrass, Knotweed, Oxalis, Poa Annua, Spurge and other weeds, as listed.

Fertilizer provides turf greening and extended feeding.

ACTIVE INGREDIENT:

Pendimethalin, CAS [40487-42-1]	0.86%
OTHER INGREDIENTS:	<u>99.14%</u>

ACCEPTED

Dec 23, 2019

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

EPA Reg. No. 34704-832

CAUTION

KEEP OUT OF REACH OF CHILDREN

TOTAL 100.00%

Si usted entiende la etiquette, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

EPA REG. NO. 34704-832 EPA EST. NO. 34704-FL-1 NET WEIGHT: 50 LBS. (22.68 KG) IHT

08/19

• 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 by a poison control center or doctor.
 Do not give anything by mouth to an unconscious person.
 Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
 Remove contact lenses, if present, after 5 minutes, then continue rinsing.
 Call a poison control center or doctor for treatment advice.
 Take off contaminated clothing.
 Rinse skin immediately with plenty of water for 15 to 20 minutes.
 Call a poison control center or doctor for treatment advice.
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 further treatment advice.

Have this product container or label with you when calling a poison control center, or doctor, or when going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes eye irritation. Avoid contact with skin, eyes, or clothing. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling. May be harmful if swallowed. Avoid inhalation. Do not contaminate feed or foodstuffs. Do not feed clippings to livestock. Do not graze treated areas.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear; long sleeved shirt and pants, chemical resistant gloves made of waterproof materials such as butyl rubber >14 mils, natural rubber >14 mils, neoprene rubber > 14 mils, or nitrile rubber > 14 mils, shoes plus socks. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

User 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 as soon as possible after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Non-Target Organism Advisory Statement

ENVIRONMENTAL HAZARDS

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.

This pesticide is toxic to fish. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent areas. Do not contaminate water when cleaning equipment or disposing of equipment wash water. In case of product spill; sweep up, and use as per label instructions or dispose of as directed.

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 this product through any type of irrigation system. Keep children and pets out of treated areas until dust has settled or turf has dried after "watering in." Do not apply aerially.

AGRICULTURAL USE REQUIREMENTS

Use the product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains the requirements for the protection of agricultural workers on farms, forests and nurseries, 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 intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

(AGRICULTURAL USE REQUIREMENTS CONT'D)

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early reentry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical resistant gloves made of waterproof materials such as butyl rubber >14 mils, natural rubber >14 mils, neoprene rubber > 14 mils, or nitrile rubber > 14 mils, shoes plus socks.

WEED RESISTANCE MANAGEMENT

For resistance management, Pendimethalin 0.86 on Fertilizer is a Group KI herbicide. Any weed population may contain or develop plants naturally resistant to Pendimethalin 0.86 on Fertilizer and other Group K1 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

• Rotate the use of Pendimethalin 0.86 on Fertilizer or other Group K1 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

• 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 such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

• 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 certified crop advisors for additional pesticide resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.

• For further information or to report suspected resistance, call Loveland Products, Inc.: 1-888-574-2878.

NON-AGRICULTURAL USE

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, or nurseries. For other areas of use, it is suggested that applicators and other handlers wear long sleeved shirt, long pants, waterproof footwear, plus socks, waterproof gloves and protective eyewear. Users should wash hands before eating, drinking, using tobacco, using the toilet. Do not allow workers, children, or pets entry to treated areas until dust has settled and the area is dry after watering in.

STORAGE AND DISPOSAL

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

STORAGE: Store in original labeled container, in a dry, cool area out of reach of children and pets. Partially used bags should be sealed by folding down the top and securing.

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: Do not reuse empty bag. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State or local authorities, by burning. If burned stay out of smoke.

Also for use in and around ornamental plantings and ground covers as listed.

WEEDS CONTROLLED

When used at recommended rates this product will prevent weed seed growth of the following grassy and broadleaf weeds and provides turf a nitrogen feeding.

Grassy Weeds

Poa Annua Barnyardgrass Crabgrass (Large, Smooth) Foxtail (Yellow, Green) Goosegrass Fall panicum

Broadleaf Weeds

Common Chickweed Cudweed Henbit Hop Clover Knotweed Oxalis Prostrate Spurge Yellow Woodsorrel

To prevent goosegrass, crabgrass, foxtail, barnyardgrass, fall panicum, Oxalis, Knotweed, Prostrate Spurge, apply in the spring before they sprout. To prevent Poa Annua and fall germinating chickweed, apply product to dry foliage in late summer or early fall before seeds germinate. For continued "weed-free" turf, under heavy weed pressure, a second, and third, timely annual treatment may be required.

WHEN, WHERE AND HOW MUCH TO USE

For approved established turfgrass species as listed. Do not apply when turfgrass is wet. When applied prior to germination of weeds this product will control weeds as listed here in established Northern and Southern turf grasses. Apply the lower rate where weeds have been sparse. Use a higher rate for turf known or expected to be under heavy weed seed germination pressure. **For Turf:** Maximum application rate of 3 lb ai/A, Maximum application rate of seasonal = 5 lbs ai/A. **For residential lawn and sod farm uses:** Maximum application rate of 2.0 lbs. active ingredient per acre.

NORTHERN COOL SEASON TURFGRASS

For Kentucky Bluegrass, Perennial Ryegrass, Fine Fescue, Tall Fescue, Bentgrass and Poa Annua (except putting greens and tees). Apply 2.67 to 4.67 lbs. per 1,000 sq.ft. equivalent to 1.0 to 1.75 lbs. a.i. Pendimethalin per acre 7-14 days before expected weed seeds germinate.

SOUTHERN WARM SEASON TURFGRASS

For Bermudagrass (non "winter-overseeded"), St. Augustinegrass, Bahiagrass, Zoysiagrass, Centipedegrass and blends of these grasses. Apply 2.67 to 5.34 lbs. per 1,000 sq.ft. equivalent. 1.0 to 2.0 lbs. of a.i. Pendimethalin per acre prior to germination of weed seeds. Where light weed infestations are expected, the lower rates may be used. For extended weed control, a repeat application is recommended.

(WHEN, WHERE AND HOW MUCH TO USE CON'T)

For best results, irrigate the treated area after application with ¼ to ½ inch water to remove the granules from the foliage and to move the product to the soil surface for an effective chemical herbicide barrier. Do not destroy the chemical herbicide barrier created at the soil surface by raking or aerifying the turf after applying this product.

This product may be used on other types of turf grass in residential lawns and sod farms at a rate not to exceed the maximum of 5.34 lbs. of product per 1,000 sq.ft. (equivalent to 2 lbs. a.i. per acre).

PRECAUTIONS IN USING

Do not use on Bentgrass and Poa Annua putting greens and tees, or on dichondra. Where Bentgrass and Bentgrass-containing turf and Poa Annua are the desired species, a lower rate application only is recommended. On cool season turfgrass avoid applications when temperatures are regularly in the 80's. This product may cause discoloration and thinning where over applications have been made if the turfgrass is under severe stress conditions (disease, drought, low temperatures - below 40° F, scalping, and excessive soil moisture).

PRECAUTIONS FOR BERMUDAGRASS, BENTGRASS, POA ANNUA

Do not apply to dormant Bermudagrass, Bentgrass or Poa Annua (turf that is not growing actively or has frost injury). May be applied to dormant Bermudagrass if it has been maintained at ½ inch or more high cut and is growing in medium fine textured soils such as clays and clay loams. When applied to dormant Bermudagrass, greening up may be delayed 2 to 3 weeks in the spring. The delay in this greening process may be more noticeable on low cut Bermudagrass on sandy soils. Where turf thinning or damage has occurred due to winter injury do not make an application until turf has greened up and is growing vigorously. Application to Bermudagrass over seeded with a cool season grass may injure and thin the over seeded variety. Do not apply to Bentgrass or Poa Annua after late summer.

OTHER PRECAUTIONS

For Seeding: Delay seeding 4 months and sprigging by 5 months after application. For best results, the soil surface should be worked (verticut and/or etc.) before planting, to destroy any remaining chemical residue. For newly planted areas; for newly seeded areas, wait until the turf has been mowed up to 4 times and is growing vigorously before application. Do not apply to the same area more than twice in one year. Remove product from sidewalks, stone, patios, etc. Do not apply to cement, stone, etc. If contact occurs to those areas, clothing and shoes, brush off particles as soon as possible to avoid yellow staining. If necessary, rinse with water. If metallic surfaces (golf course equipment, carts, autos, etc.) are present at the application site, do not apply this product under windy conditions (5-10 mph) due to its yellow staining potential.

This product gives preemergence control of crabgrass, chickweed, foxtail, goosegrass, knotweed, oxalis, Poa Annua, and spurge.

Quick Greening and Extended Feeding Recommended for professional turf care managers. See section for ornamental plants and ground covers.



PRECAUTIONS IN USING

Do not apply to or allow product contact with areas of cement, or stone, clothing or shoes. If contact occurs, brush off particles to prevent staining. If necessary rinse with water. Exercise caution or, do not apply under windy conditions (5-10 mph) when metallic surfaces (automobiles, etc.) are in the area, as product wind drift may stain those surfaces.

SPREADER SETTINGS

These spreader settings are based on the fertilizer blend which has been selected for your turfgrass. To check for your spreader settings refer to your spreader manual details and apply enough product to cover 500 sq.ft. (10'x50') based on the amount of active ingredient of this product you wish to apply per acre ranging from 1.0 lb. per acre up to 2.0 lbs. per acre. Record and adjust your spreader settings accordingly. Do not apply this product unless your spreader is properly calibrated.

Spreader	Recommended pounds of this product to apply per 1,000 sq.ft. = to pounds of active ingredient per acre.				
	2.67#=1.0	3.31#=1.24	4.00#=1.5	4.67#=1.75	5.34#=2.0
Scotts Drop	ххх	XX	хх	XX	хх
Gandy 30"	хх	XX	хх	ХХ	хх
Scotts					
Rotaries					
R-7, R-7x	х	х	х	х	х
R-8, R-8A	х	х	х	х	х
Lely Models	хх	XX	хх	XX	хх
Deere	хх	ХХ	хх	XX	ХХ

(Label NOTE from Ed: x's in the above chart will be changed to actual applicable spreader settings on the product bag to correspond to the density of product related to the plant food contents.)

FOR USE AROUND ORNAMENTALS

In ornamentals, remove established weeds to prevent further weed seeding: Smooth soil surfaces or mow beneath, around, and in, the planting before application. Apply 1 to 2 weeks before expected weed seeds germinate. Follow the application with ¼ to ½ inch of sprinkler irrigation or the equivalent rainfall will benefit in the same manner, to move the herbicide down to soil surface.

When moderate weed seed germination is expected, apply 2.67 lbs. per 1,000 sq.ft. = 1 lb. a.i. per acre. For heavy expected weed seed germination, apply 5.34 lbs. per 1,000 sq.ft. = 2 lbs. a.i. per acre.

Apply only to established plantings.

TOLERANT GROUND COVERS

The number of herbicides that can be used in ground covers is very limited however this product may be used for the preemergence control of the weed species as listed in and around the following established ground covers, in landscape plantings, and freeway right-of-ways.

Common Name

Capeweed Daisy, Trailing African Gazania Rose-of-Sharon Iceplant, Large leaf Ivy, English Ivy, Geranium Myoporum Pachysandra Potentilla spp. Potentilla spp.

Scientific Name

Arctotheca calendula Osteospermum fructicosum Gazania splendens Hypericum calycinum Carpobrotus edule Helix hedera Pelargonium peltatum Myoporum parviflorum Pachysandra terminalis Potentilla Jackmanii Potentilla verna

WEED CONTROL IN AND AROUND THE FOLLOWING ORNAMENTAL PLANTINGS

This product is recommended for use on the following established field grown plants, trees, and established ground covers. Care must be taken to see that soil or planting mixes have settled firmly around plants and that there are not cracks that would allow the granules to directly contact the roots. Directed application of the granules to the smoothly worked soil surface or turfgrass beneath or around the plants will result in best weed control and ornamental tolerance to the herbicide. Only those ornamentals listed on this label should be planted into soil treated the previous season with this product. Injury may occur to other species. Do not apply to seedbeds.

ESTABLISHED ORNAMENTAL PLANTS

<u>Scientific Name</u>		
Abelia grandiflora		
var. grandiflora		
Fraxinus pennsylvania		
Rhododenron indicum		
Berberis thunbergil		
var. atropurpurea		
Betula pendula		
Betula nigra		
Buxus sempervirens		

ESTABLISHED ORNAMENTAL PLANTS

Common	Name

Capejasmine

Cedar, Northern white Cedar, Red Cotoneaster Crapemyrtle, Common Dogwood, Flowering Dogwood, Silky Euonymus

Fir, Fraser Fir, White Forsythia, Border Hemlock, Eastern Holly, American Holly, Chinese Holly, Japanese Holly, Yaupon

Juniper, Chinese

Juniper, Shore Juniper, Trailing

Laurel, Mountain Lilac, Common Locust, Honey

Maple, Red Nandina Oak, Live Oak, Water Peach Photina Pieris, Japanese Pine, Austrian* Pine, Loblolly Pine, White Privet, California Privet, Japanese Sourwood Spirea Spruce, Colorado Blue

Scientific Name Gardenia jasminoldes var.mystery Thuja occidentalis Juniperus viginiana Contoneaster horizonalis Lagerstroemia indica Cornus florida Cornus amomum Euonymus alata var. compacta Abies Fraseri Abies concolor Forsythia intermedia Tsugua canadensis Ilex Opaca var. tsuga Ilex cornuta Ilex crenate compacta Ilex vomitoria var. shillings swarf Juniperus chinensis var. pfitzeriana var. pfitzer aurea Juniperus conferta Juniperus horizontalis var. plumosa var. prince of wales var. youngstown Kalmia latifolia Syringa vulgaris **Gleditsia Triacanthos** var. inermis Acer rubrum Nandina domestica Quercus virginiana Quercus nigra Prunus persica Photina Frazerii Pieris japonica Pinus nigra Pinus taeda Pinus strobus Ligustrum, ovalifolium Ligustrum japonicum Oxydendron arboreum Spirea vanhouttel **Picea pungens**

ESTABLISHED ORNAMENTAL PLANTS

<u>Common Name</u> Tobira Waxmyrtle, Common Yew Yew, Japanese *Do not apply to Austrian Pine in California. <u>Scientific Name</u> Pittosporum tobiri Myrica cerifera Taxus Media Taxus cuspidata

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. Box 1286, GREELEY, CO 80632-1286.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

For non-emergency (e.g., current product information), call Loveland Products, Inc.: 1-888-574-2878.

