

34704-610

3/26/2013

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

Chris Mason, Ph.D.  
Loveland Products, Inc.  
P.O. Box 1286  
Greeley, CO 80632

MAR 26 2013

Subject: Notification; Per PR-Notice 98-10  
Curbit EC Herbicide  
EPA Reg. No. 34704-610  
Date Submitted: March 13, 2013

Dear Dr. Mason:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated March 13, 2013 for the product referenced above. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions regarding this letter, please contact me at (703) 306-0415 or [davis.kable@epa.gov](mailto:davis.kable@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis".

Kable Bo Davis  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)







# CURBIT<sup>®</sup> EC

## HERBICIDE

NOTIFICATION

MAR 26 2013

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**A Selective Herbicide for Preemergence Control of Certain Annual Grasses and Broadleaf Weeds in Cucumbers, Melons, Pumpkins, Summer Squash, Winter Squash and Watermelons.**

**ACTIVE INGREDIENT:**

Ethalfluralin: N-ethyl-N-(2-methyl-2-propenyl)-2,6-dinitro-4-(trifluoromethyl)benzenamine ..... 35.4%

**OTHER INGREDIENTS\*** ..... 64.6%

**TOTAL** ..... 100.0%

\*Contains petroleum distillates, xylene or xylene range aromatic solvents.  
Contains 3.0 pounds active ingredient per gallon.

### KEEP OUT OF REACH OF CHILDREN DANGER—PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See Below for Additional Precautionary Statements.

#### FIRST AID

- |                                |   |
|--------------------------------|---|
| <b>If in eyes:</b>             | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>                      |
| <b>If on skin or clothing:</b> | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>  |
| <b>If inhaled:</b>             | <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>                     |
| <b>If swallowed:</b>           | <ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give <b>any</b> liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul> |

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

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

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

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EPA EST. NO. 34704-MS-001

NET CONTENTS 2.5 GAL (9.46 L)

103006 V7D 11P10

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**CURBIT® EC HERBICIDE  
EPA REG. NO. 34704-610**

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
DANGER—PELIGRO**

Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or inhaled. This product may cause skin sensitization reactions in certain individuals. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.

**Personal Protective Equipment:**

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

**Applicators and other handlers must wear:**

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves, such as barrier laminate or viton,
- Chemical-resistant footwear plus socks,
- Protective eyewear,
- Chemical-resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading.

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

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.

**Engineering controls statements:**

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Runoff or erosion from treated areas may be hazardous to fish in neighboring areas. Due to risk to plants and animals in aquatic habitats that receive runoff containing this product, use of controls such as a vegetative buffer strip to filter such water flow from recently treated fields is recommended.

**PHYSICAL OR CHEMICAL HAZARDS**

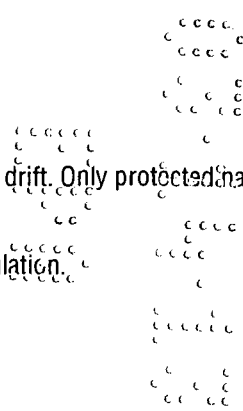
Flammable. Do not use or store near heat or open flame.

**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.



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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. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves, such as barrier laminate or viton,
- Chemical-resistant footwear plus socks, and
- Protective eyewear.

**GENERAL AGRICULTURAL PRECAUTION**

Poor weed control and/or crop injury may result if directions are not followed. Uneven application or over-application can result in erratic weed control or injury to the treated or rotational crops.

Do not graze or forage crop grown in treated soil or cut for hay or silage.

Do not apply Curbit® EC Herbicide to soils which are wet, cloddy, or subject to prolonged periods of flooding because poor weed control or crop injury may result.

Do not apply to any area not specified on the label.

**ROTATIONAL RESTRICTIONS**

**Replanting**

If replanting is required, replant only crops listed on this or other ethalfluralin labels.

**Sugar Beets or Red Beets**

Do not plant sugar beets or red beets within 13 months following an application of 3.0 pints or more per acre of Curbit EC Herbicide. Where less than 3.0 pints of Curbit EC Herbicide have been applied, sugar beets or red beets may be planted 8 months after an application of Curbit EC Herbicide, if the Curbit EC Herbicide treated soil is moldboard plowed to a depth of a least 12 inches prior to planting.

**Spinach or Oats**

In California, Arizona, and Texas, do not plant spinach or oats within 8 months following an application of 3.0 pints per acre or more of Curbit EC Herbicide.

**USE PRECAUTIONS**

Do not incorporate Curbit EC Herbicide prior to planting as crop loss will occur. Do not use Curbit EC Herbicide under or over row covers, hot caps, plastic mulches, or other plant covers as severe crop injury will occur. Do not make broadcast application to transplants. Do not plant in a furrow.

Under cool temperature conditions that can delay early seedling emergence or growth, Curbit EC Herbicide can cause plant injury or crop failure. Be especially cautious during first planting of the season when this condition is likely to occur.

**WEEDS CONTROLLED BY CURBIT EC HERBICIDE SURFACE APPLICATION**

Curbit EC Herbicide is a preemergence herbicide that controls many annual grasses and broadleaf weeds. Curbit EC Herbicide controls weeds as they germinate. Curbit EC Herbicide will not control established weeds.

Curbit EC Herbicide surface applied after planting will control the following weeds:

**Grasses:**

Crabgrass (Large crabgrass) (Smooth crabgrass)	( <i>Digitaria</i> spp.)	Panicum, fall Panicum, Texas (Buffalograss) (Colorado grass)	( <i>Panicum uichotomiflorum</i> ) ( <i>Panicum texanum</i> )
Foxtail millet	( <i>Setaria italica</i> )	Signalgrass, broadleaf (Brachiaria)	( <i>Brachiaria platyphylla</i> )
Goosegrass	( <i>Eleusine indica</i> )		
Johnsongrass (from seed)	( <i>Sorghum halepense</i> )		

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**Broadleaf Weeds:**

Carpetweed	( <i>Mollugo verticillata</i> )	Purslane, common	( <i>Portulaca oleracea</i> )
Lambsquarters, common	( <i>Chenopodium album</i> )	Pusley, Florida	( <i>Richardia scabra</i> )
Pigweed	( <i>Amaranthus spp.</i> )		
(Prostrate pigweed)			
(Redroot pigweed)			
(Smooth pigweed)			
(Spiny pigweed)			

**MIXING AND APPLICATION DIRECTIONS**

Start with a clean spray tank. Fill sprayer 1/3 to 1/2 full with clean water. Start agitation. Add correct quantity of Curbit EC Herbicide, continue agitation and finish filling the tank. Do not mix this product with fertilizer. Apply Curbit EC Herbicide using any properly calibrated, low pressure herbicide sprayer that will apply the spray uniformly. Do not apply this product through any type of irrigation system.

**SOIL TEXTURE GUIDE**

The amount of Curbit EC Herbicide applied will vary with the soil texture and organic matter. A fine textured soil will require more Curbit EC Herbicide per acre than a coarse soil. Choose the proper rate based on the following soil texture group and specific crop recommendations. Do not exceed recommended rates.

Soil Texture Group	Soil Classification
Coarse soils: (Light)	Sand, loamy sand, sandy loam
Medium soils	Loam, silty clay loam*, silt loam, silt, sandy clay loam*
Fine soils: (Heavy)	Clay, clay loam, silty clay, silty clay loam, sandy clay, sandy clay loam*

\*Silty clay loam and sandy clay loam soils are transitional soils and may be classified as either medium or fine textured soils. If silty clay loam or sandy clay loam soils are predominantly sand or silt, they are usually classified as medium textured soils. If they are predominantly clay, they are usually classified as fine textured soils.

**ACTIVATION DIRECTIONS**

**IRRIGATED AGRICULTURE:** Where overhead sprinkler irrigation (solid set, center pivot or continuous flow lateral move) is used, activate Curbit EC Herbicide with a minimum of 1/2" of irrigation water within 2 days after application. For flood or furrow irrigation, refer to Non-Irrigated Agriculture activation directions below. Irrigated fields may be shallowly cultivated without loss of Curbit EC Herbicide activity.

**NON-IRRIGATED AGRICULTURE:** A single, 1/2" rainfall within 5 days of application is necessary to activate Curbit EC Herbicide. If a single 1/2" rainfall is not received, a shallow cultivation will activate Curbit EC Herbicide. Rainfall activated Curbit EC Herbicide may be shallowly cultivated without loss of activity.

**NOTE:** Heavy rainfall and/or **excessive** irrigation soon after application of Curbit EC Herbicide may cause crop injury. This potential injury can be enhanced if seeding depth is too shallow.

**CROP RECOMMENDATIONS**

**CUCUMBERS, MELONS, PUMPKINS\*, SUMMER SQUASH\* WINTER SQUASH\*, WATERMELONS—POSTPLANT SURFACE APPLIED PREEMERGENCE WEED CONTROL:** Curbit EC Herbicide should be used only as a postplant surface applied herbicide prior to weed emergence. Apply to seeded crop prior to its emergence, or apply as a banded spray between rows after crop emergence or transplanting. Refer to the section titled "ACTIVATION DIRECTIONS".

For broadcast application on direct-seeded crop, apply Curbit EC Herbicide to the soil surface at seeding, or no later than 2 days after seeding. DO NOT SOIL INCORPORATE CURBIT EC HERBICIDE PRIOR TO PLANTING AS CROP LOSS WILL OCCUR.

\*Certain crop varieties may have potential for injury or loss due to use of this herbicide. Consult your agricultural experiment station, or other qualified crop advisors for information pertaining to crop varieties grown in your area.

**SOIL PREPARATION**

A firm seedbed that is trash and clod free is desirable for a surface application of Curbit EC Herbicide. Crop residues, existing weeds and cloddy conditions may interfere with the performance of Curbit EC Herbicide. Bedded culture is preferable to flat culture because of better drainage. Do not plant in a furrow.

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**RATES**

These recommendations are given as the broadcast rates of Curbit EC Herbicide per acre. Where a rate range is shown, use the lower rate for coarser textured soils or soils with lower organic matter. Use the higher rate, where a rate range is shown, on soils containing more than 5% organic matter. Where soil texture is variable within the same field, let the finest soil texture which predominates in that field determine the use rate (see SOIL TEXTURE GUIDE). Curbit EC Herbicide is not recommended for use on soils containing more than 10% organic matter.

Broadcast the following rates in at least 20.0 gallons of water per acre by ground equipment only.

Soil Texture*	Curbit Broadcast Rates/A (pt)
Coarse	3.0
Medium	3.0 to 4.0
Fine	4.0 to 4.5

\* Weed control may be reduced on soils with organic matter over 5%.

**BAND TREATMENT:** Curbit EC Herbicide may also be used as a banded spray **between** rows of direct seeded or transplanted cucumbers, melons or watermelons grown on plastic mulch. Reduce rate and spray volume in proportion to area actually sprayed using the following formula:

$$\begin{array}{l} \text{Band width in inches /} \\ \text{Row width in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{RATE per acre} \end{array} = \begin{array}{l} \text{Band RATE} \\ \text{per acre} \end{array}$$
  

$$\begin{array}{l} \text{Band width in inches /} \\ \text{Row width in inches} \end{array} \times \begin{array}{l} \text{Broadcast} \\ \text{VOLUME per acre} \end{array} = \begin{array}{l} \text{Band} \\ \text{VOLUME per acre} \end{array}$$

Do not spray over plastic mulch.

**RESTRICTIONS FOR CERTAIN STATES**

**CALIFORNIA:** In coarser soils, activation of Curbit EC Herbicide may occur with as little as 1/8" of rainfall or irrigation. As a guideline, 1/4" is suggested in such areas instead of the 1/2" normally recommended on this label.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Avoid freezing. Store above 40 °F (5 °C). If frozen, poor weed control may result. Do not use or store near heat or open flame. Store in original container only. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state or local procedures. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. 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.

**Nonrefillable container.** Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at [www.acrecycle.org](http://www.acrecycle.org). If not recycled, then 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.

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.

**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.

**For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.**



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**CURBIT EC HERBICIDE PERFORMANCE GUARANTEE**  
**A LIMITED WARRANTY OF CURBIT EC HERBICIDE WEED AND GRASS CONTROL**

Loveland Products Inc. warrants that Curbit EC Herbicide will provide commercially acceptable control of the weeds and grasses as indicated on its current label when used according to label directions and subject to the following limitations:

1. Purchaser must notify Loveland Products Inc. promptly if a lack of commercially acceptable control occurs. Notice must be given within forty-five (45) days after the first planting or after application of Curbit EC Herbicide to the treated crop, whichever occurs later.
2. A Loveland Products Inc. representative must be satisfied that Purchaser used Curbit EC Herbicide according to the label directions and must visually observe unsatisfactory control of weeds in the field.
3. The Purchaser must provide a Loveland Products, Inc. representative with an invoice or other satisfactory record which shows the price and quantity of Curbit EC Herbicide purchased.
4. Loveland Products Inc.'s liability will be limited to a refund of the purchase price of the Curbit EC Herbicide applied to the acreage on which commercially acceptable control was not obtained.
5. Void outside the U.S.A.

**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.

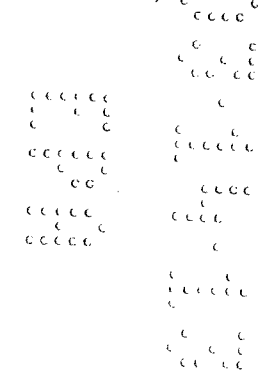
Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other 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.

Curbit is a registered trademark of Loveland Products, Inc.



**FORMULATED FOR**  
**LOVELAND PRODUCTS, INC.**  
**P.O. BOX 1286, GREELEY, COLORADO 80632-1286**