

68156-6

03/27/2007

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 27 2007

Steve A. McMaster  
Dintec Agrichemicals  
9330 Zionsville Rd.  
Indianapolis, IN 46268-1054

Dear Mr. McMaster:

Subject: Supplemental Labeling Amendment

Confidential Statement of Formula  
Pendimethalin L  
For Weed Control in Bearing Citrus and Tree Nuts  
For Weed Control in Carrots  
For Preemergence Use in Mint (Spearmint and Peppermint)  
EPA Reg. No. 68156-6  
Submission dated January 15, 2007

The labeling, referred to above, submitted in connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, provided that you make the following changes:

A. For Weed Control in Bearing Citrus and Tree Nuts

5. Under "Directions for Use";

Delete "(including but not limited to)" from the columns of Citrus and Tree Nuts.

6. Under "Ground Applications"

Add "DO NOT apply over the top of trees with leaves or buds or fruit."

7. Under "Chemigation Applications"

- Add "DO NOT apply Ipimethalin L-treated irrigation water over the top of trees with leaves or buds or fruit."
- Rearrange the appearance of equation #4,  $S = (C \times R) / 43500$ .

8. Under "Specific Use Restrictions";

Add the following statements:

- Do not apply within one day of harvest of citrus fruit.
- Do not apply this product through any other irrigation system.

B. For Weed Control in Carrots

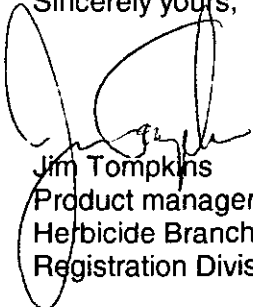
Add the following statements:

- Do Not feed forage or graze livestock in treated fields.
- Do not use this product on peat or muck soils.

The amended label supersedes all previously accepted labels. A stamped copy of the revised label is enclosed for your records. Please submit one copy of your final printed label before you release the product for shipment.

The proposed Basic and two alternate Confidential Statement of Formulas (CSF) are acceptable. The new basic CSF replaces the currently accepted one. Copies of the CSFs will be kept in our files for this product.

Sincerely yours,



Jim Tompkins  
Product manager (25)  
Herbicide Branch  
Registration Division (7505P)

CONCURRENCES

SYMBOL >	7505P	7505P						
SURNAME >	Bien	Tompkins						
DATE >	3-19-07	3-27-07						

# Supplemental Labeling

Dintec Agrichemicals 9330 Zionsville Road Indianapolis, IN 46268-1054 USA

## Ipimethalin-L

EPA Reg. No. 68156-6

### Weed Control in Bearing Citrus and Tree Nuts

#### ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Ipimethalin-L herbicide before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of Ipimethalin-L according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Ipimethalin-L.

#### Directions for Use

Refer to product label for Ipimethalin-L for General Information, General Use Precautions, Mixing and Application instructions.

Apply Ipimethalin-L to the following bearing citrus fruits and tree nuts crop groupings and individual crops:

Citrus (including but not limited to):		Tree Nuts (including but not limited to):	
calamondin	lime	almond	filbert (hazelnut)
citrus citron	mandarin (tangerine)	beech nut	hickory nut
citrus hybrids	orange (sweet and sour)	Brazil nut	macadamia nut
grapefruit	pummeio	butternut	pecan
kumquat	satsuma mandarin	cashew	pistachio
lemon	tangelo	chestnut	walnut
		chinquapin	

#### Non-Target Species

The following mitigation measures are required if non-target plants occur in proximity to the application site:

- Leave untreated buffer zone of 80 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.

#### Endangered Species

The following mitigation measures are required if endangered species occur in proximity to the application site:

- Leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.

To determine whether your county has an endangered species, consult the web site <http://www.epa.gov/espp/usa-map.htm>. Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered species occur in the area to be treated.

**Weeds Controlled**

In addition to controlling the weeds listed on the product label for Ipimethalin-L, this product (when applied as directed) will control the following grass and broadleaf weeds in bearing citrus and tree nuts:

**Grass Weeds**

bluegrass, annual	lovegrass	sprangletop
juncigerice	panicum, browntop	woolly cupgrass

**Broadleaf Weeds**

carpetweed	knotweed, prostrate	shepherd's purse
chickweed, common	London rocket	smartweed, Pennsylvania
fiddleneck	puncturevine	velvetleaf
henbit		

**Use Methods and Timings**

**Ground Application:** Uniformly apply as a surface incorporated or (surface) preemergence application before weed emergence using ground equipment. Make a single application of Ipimethalin-L as a broadcast or banded treatment in 10 to 40 gallons of water per acre.

**Chemigation Application:** Apply Ipimethalin-L through solid set, hand move, low volume sprinkler (micro sprinkler), drip (trickle) and flooded basin irrigation systems. Uniform distribution of irrigation water with Ipimethalin-L will help to avoid crop injury, lack of herbicide effectiveness or illegal pesticide residues in the crop. See Chemigation section on the product label for complete directions. **Do not** apply this product to bearing citrus and tree nuts through any other type of irrigation system.

**Low Volume Sprinkler (Micro Sprinkler) and Drip (Trickle) Irrigation Instructions:** Use a low volume sprinkler, 4 to 50 gallons per hour (gph) per emitter, drip 0.5 to 3 gph per emitter. The point of application should be above ground. The irrigation system should run a sufficient amount of time before injecting Ipimethalin-L in order to have all emitters functioning properly. After the system is operating properly, the length of injection should be such that, at one period of time during the injection, the first and last emitters in the system contain water treated with Ipimethalin-L. Add Ipimethalin-L to the supply tank that is already filled with the required amount of water for the injection period. Maintain proper agitation in the injection tank. Mix Ipimethalin-L in clean water and inject this mixture down-line from filters. Following the injection, the system should be flushed for a period of time sufficient to clear the line of Ipimethalin-L. (If Ipimethalin-L is applied during a normal irrigation cycle, injection should be made during the last stage.)

**Chemigation Calibration (for Low Volume Micro Sprinklers):** The use rate calculation is based upon **wetted area** around emitters, **not** on tree acres. To determine the correct amount of Ipimethalin-L, use the following formula:

1. A = treated area per each sprinkler  
A = 3.14 x (radius x radius) (area of a circle is  $\pi r^2$ )
2. B = the area in square feet wetted in each acre  
B = A x (number of sprinklers/acre)
3. C = the total area (in sq ft) wetted by the system  
C = B x (acres covered by system)
4. R = rate of Ipimethalin-L per treated acre (based upon length of control desired)  
S = amount of Ipimethalin-L to inject into the irrigation system  
$$S = \frac{C}{43,560} \times R = \text{quarts of Ipimethalin-L to inject into the irrigation system}$$

**Example:** If the average distance from sprinklers to the perimeter of wetted area measured on the soil surface is 4 ft, then,

$$A = 3.14 \times (4 \times 4)$$

$$A = 50.24 \text{ feet}$$

If there are 140 sprinklers per acre, then,

$$B = 50.24 \times 140$$

$$B = 7034 \text{ sq ft wetted per acre}$$

If the irrigation system covers 20 acres, then,

$$C = 7034 \text{ sq ft per acre} \times 20 \text{ acres}$$

$$C = 140,680 \text{ sq ft wetted by irrigation system}$$

If the desired application rate per treated acre is 4 quarts of Ipimethalin-L, then,

$$S = \frac{140,680}{43,560} \times 4 = 12.9 \text{ quarts to treat the above 20-acre grove}$$

S = 12.9 quarts of Ipimethalin-L. This amount of Ipimethalin-L should be injected into the irrigation system when the wetted pattern is 4 ft radius and based upon 140 trees per acre.

**Flooded Basin Irrigation System Precautions:**

- Recirculate tail water or runoff water from flood irrigation and contain it in the field of initial application or use it only on adjacent tree or vine crops for which Ipimethalin-L is registered for use.
- The pesticide in the water of systems using a gravity-flow pesticide-dispensing system must be metered at the head of the field downstream of a hydraulic discontinuity (e.g., drop structure, weir box) to decrease the potential for water source contamination from backflow water.

**Application Rates in Bearing Citrus and Tree Nuts**

Use the recommended rates for Ipimethalin-L given in the following table depending upon the desired length of control.

Length of Control	Ipimethalin-L (quart/acre)
Short-term control (4 months)	2.3
Long-term control (6 to 8 months)	4.6

**Specific Use Restrictions:**

- **Preharvest Interval: Do not** apply within 60 days of harvest for bearing citrus fruit and tree nuts except for almond.
- **Preharvest Interval: Do not** apply within 120 days of harvest for almond.
- Apply the spray directly to the ground under the trees and/or in areas between the rows. **Do not** apply over the top of the trees with leaves, buds, or fruit. Contact with leaves, shoots or buds by the spray mixture may cause injury.
- **Do not** apply by air to bearing citrus and tree nuts.
- **Do not** apply more than 6.9 quarts per acre per year.
- **Do not** feed forage or graze livestock in treated groves or orchards.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

Under the Federal Insecticide  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

68150-6  
MAR 27 2000

R130-004  
EPA-accepted: \_\_\_/\_\_\_/\_\_\_  
Initial printing.

6/9

# Supplemental Labeling

Dintec Agrichemicals

9330 Zionsville Road

Indianapolis, IN 46268-1054 USA

## Ipimethalin-L

EPA Reg. No. 68156-6

### Weed Control in Carrots

#### ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Ipimethalin-L herbicide before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of Ipimethalin-L according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Ipimethalin-L.

#### Directions for Use

Refer to product label for Ipimethalin-L for General Information, General Use Precautions, Mixing and Application instructions.

Ipimethalin-L may be applied as a preemergence treatment or a layby (last mechanical cultivation) treatment in carrots.

#### Non-Target Species

The following mitigation measures are required if non-target plants occur in proximity to the application site:

- If the product is applied with ground equipment, leave an untreated buffer zone of 80 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.
- If the product is applied with aircraft, leave an untreated buffer zone of 200 feet. Use straight stream nozzles (such as D-6 to D-8). Wind speed can be no more than 8 mph and release height must be 15 feet or less.

#### Endangered Species

The following mitigation measures are required if endangered species occur in proximity to the application site:

- If the product is applied with ground equipment, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.
- If the product is applied with aircraft, leave an untreated buffer zone of 1000 feet. Use straight stream nozzles (such as D-6 to D-8). Wind speed can be no more than 8 mph and release height must be 15 feet or less.

To determine whether your county has an endangered species, consult the web site <http://www.epa.gov/espp/usa-map.htm>. Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered species occur in the area to be treated.

**Use Methods and Timings**

For all methods, uniformly apply the product in 10 gallons of water or more per acre with ground equipment or in 5 gallons of water per acre with air equipment. Treatments of Ipimethalin-L are most effective when adequate rainfall or overhead irrigation is received after application.

**Preemergence Application:** Apply a single broadcast application of Ipimethalin-L by ground or air at 2.3 pints per acre. Apply within two days after planting but before carrots and weeds emerge.

**Layby Application:** Apply Ipimethalin-L by ground at layby at 2.3 pints per acre as a directed spray to the soil between rows of carrots before weeds emerge.

**Sprinkler Irrigation System Application:** Apply Ipimethalin-L as a preemergence treatment after planting. Uniform distribution of irrigation water with Ipimethalin-L will help to avoid crop injury, lack of herbicide effectiveness or illegal pesticide residues in the crop. See Chemigation section of the product label for complete directions.

**Specific Use Restrictions:**

- **Preharvest Interval:** Do not apply within 60 days of harvest.
- Do not apply tank mixes through any type of irrigation system unless the label instructions for chemigation on all products are followed.
- Do not allow irrigation water treated with Ipimethalin-L to come in contact with carrots.
- Do not apply more than 2.3 pints per acre per season.
- Do not feed forage or graze livestock in treated fields.
- Do not apply on peat or muck soils.
- Do not allow spray to contact carrots or injury may occur.
- Do not apply layby applications by chemigation or by air.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No

68156-6

MAR 27 2007

# Supplemental Labeling

Dintec Agrichemicals 9330 Zionsville Road Indianapolis, IN 46268-1054 USA

## Ipimethalin-L

EPA Reg. No. 68156-6

### Weed Control in Mint (Spearmint and Peppermint)

#### ATTENTION

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Ipimethalin-L herbicide before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of Ipimethalin-L according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Ipimethalin-L.

#### Directions for Use

Refer to product label for Ipimethalin-L for General Information, General Use Precautions, Mixing and Application instructions.

#### Non-Target Species

The following mitigation measures are required if non-target plants occur in proximity to the application site:

- If the product is applied with ground equipment, leave an untreated buffer zone of 80 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.
- If the product is applied with aircraft, leave an untreated buffer zone of 200 feet. Use straight stream nozzles (such as D-6 to D-8). Wind speed can be no more than 8 mph and release height must be 15 feet or less.

#### Endangered Species

The following mitigation measures are required if endangered species occur in proximity to the application site:

- If the product is applied with ground equipment, leave an untreated buffer zone of 200 feet. The product must be applied using a low boom (20 inches above the ground) and ASAE fine to medium/coarse nozzles.
- If the product is applied with aircraft, leave an untreated buffer zone of 1000 feet. Use straight stream nozzles (such as D-6 to D-8). Wind speed can be no more than 8 mph and release height must be 15 feet or less.

To determine whether your county has an endangered species, consult the web site <http://www.epa.gov/espp/usa-map.htm>. Endangered Species Bulletins may also be obtained from extension offices or state pesticide agencies. If the bulletin is not available for your specific area, check with the appropriate local state agency to determine if known populations of endangered species occur in the area to be treated.

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.

68-156-6

MAR 27 2007



**Weeds Controlled**

In addition to controlling the weeds listed on the product label for Ipimethalin-L, this product (when applied as directed) will control the following broadleaf weeds in mint:

- |                          |                                       |                                |
|--------------------------|---------------------------------------|--------------------------------|
| canarygrass <sup>†</sup> | downy brome (cheatgrass) <sup>†</sup> | Japanese brome <sup>†</sup>    |
| cheat <sup>†</sup>       | fiddleneck                            | jointed goatgrass <sup>†</sup> |
| chickweed, common        | hairy chess <sup>†</sup>              | London rocket <sup>†</sup>     |
| chickweed, mouseear      | henbit                                | red maids                      |
| cornspurry               | Italian ryegrass <sup>†</sup>         | shepherd's purse <sup>†</sup>  |

<sup>†</sup>Control or reduced competition.

**Use Method and Timing**

**Dormant Application:** Apply Ipimethalin-L in a single broadcast application, using ground or air equipment, to dormant established mint before weed emergence. Uniformly apply the product in 10 to 40 gallons of water per acre with ground equipment or in 5 gallons of water per acre with air equipment. Treatments of Ipimethalin-L are most effective when adequate rainfall or overhead irrigation is received after application.

**Application Rates in Mint**

Use rates recommended for Ipimethalin-L alone and in tank mix applications are given in the following table.

Soil Texture	Ipimethalin-L (pint/acre)
Coarse	1.7 to 2.3
Medium	2.3 to 4.6
Fine	2.3 to 4.6

**Specific Use Restrictions:**

- o **Preharvest Interval:** Do not apply within 90 days of harvest.
- o **Chemigation:** Do not apply through any type of irrigation equipment.
- o **Do not** apply to "baby" mint in the first year of growth and establishment.
- o **Do not** apply to mint that has broken dormancy or crop injury may result.
- o **Do not** apply to mint in the first year of growth.
- o **Do not** apply more than 4.6 pints per season.
- o **Do not** allow livestock to graze on treated spent hay or feed treated spent hay to livestock.
- o **Do not** apply on peat or muck soils.
- o **Do not** apply to mint stands that have been weakened by age, disease, insect infestations, cold weather, excessive moisture, or other factors that reduce crop vigor. Mint under stress are more susceptible to herbicidal damage.