

2/19/2009



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

19 FEB 2009

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

John D Abbott Ph.D.  
Syngenta Crop Protection  
P.O. Box 18300  
Greensboro, NC 27419-8300

Dear Dr. Abbott:

Subject: Adding Commercial and Residential Turf Use  
0.25% Mesotrione on Fertilizer  
EPA Registration No. 100-1264  
0.19% Mesotrione on Fertilizer  
EPA Registration No. 100-1265  
0.08% Mesotrione on Fertilizer  
EPA Registration No. 100-1266  
Your applications of February 22, 2008

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) or 4(a) when the Agency requires all registrants of similar products to submit such data.
2. Submit by February 20, 2013 the following Study conducted on accordance with the Good Laboratory Practice Standards, 40 CFR Part 160 and appropriate test guidelines as referenced in EPA's Data Requirements for Registration Regulations, 40 CFR Part 158:

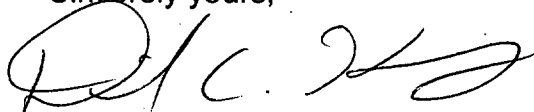
Guideline immunotoxicity study (OPPTS 870.7800). An immunotoxicity study is now a data requirement in the 40 CFR revised Part 158.

3. Submit one (1) copy of your final printed labeling before you release the product for shipment. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

If you have any questions concerning this letter please contact Mr. James Stone at 703-305-7391.

Sincerely yours,



for

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

Enclosure

3/9

**0.08% MESOTRIONE ON FERTILIZER**

Active Ingredient:	
Mesotrione* .....	0.08%
Other Ingredients: .....	99.92%
Total:	100.00%

\*CAS No.: 104206-82-8

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use on bag.

EPA Reg. No. 100-1266

EPA Est.

\_\_\_ pounds  
Net Weight

Guaranteed Analysis	
Total Nitrogen (N) .....	[XX%]
Available Phosphate (P <sub>2</sub> O <sub>5</sub> ) .....	[XX%]
Soluble Potash (K <sub>2</sub> O) .....	[XX%]
[Granular Fertilizer, CAS No. : Unknown – Blended]	

**ACCEPTED  
with COMMENTS  
In EPA Letter Dated:**

*FEB 19 2009*

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

100-1266

4/9

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 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>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>HOTLINE NUMBER</b> For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

## **PRECAUTIONARY STATEMENTS**

### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing.

### **Personal Protective Equipment (PPE)**

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

#### **Applicators and other handlers must wear:**

- long-sleeved shirt, long pants,
- chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride,
- socks and shoes.

### **User Safety Requirements**

Follow the 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:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

### **Environmental Hazards**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

### Surface Water Advisory

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

### DIRECTIONS FOR USE

It is a violation to use this product in a manner inconsistent with 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.

#### 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 12 hours.** Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- 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.

6/9

---

## GENERAL INFORMATION

---

For use on newly seeded or over-seeded established plantings of the following grasses: Kentucky bluegrass, tall fescue, fine, spreading and creeping red fescue, and perennial ryegrass.

Mesotrione may be applied to home lawns, recreational areas, golf courses and sod farms.

This product contains 0.15 pounds of mesotrione per acre per application. The maximum number of broadcast applications per site per year is three. Do not apply more than 0.5 pounds of mesotrione active ingredient per treatment site per year.

Apply anytime weeds are actively growing, when daytime temperatures are consistently above 60°F. Avoid applying when temperatures are consistently above 90°F.

Apply on a calm day.

When making applications to newly seeded and over seeded established lawns and turf, apply mesotrione impregnated on fertilizer as the last step in the planting process.

Best results will be obtained if ¼ to ½ inch of water is provided by rainfall or irrigation within three days of treatment. Dry conditions following application may reduce herbicide activity.

Mesotrione may cause temporary whitening of turfgrass foliage. In general, symptoms appear five to seven days after application and may last up to 14 days. Discoloration is most likely to occur on ryegrass lawns and turf.

## GENERAL PRECAUTIONS AND RESTRICTIONS

Do not use this product on flowers, shrubs, trees, fruit or vegetable plants. Cana, day lilies and irises are especially susceptible to injury.

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

Do not treat golf course greens with this product.

Do not apply to bentgrass, common Bermudagrass, improved seeded Bermudagrass, zoysiagrass, diondra, kikuyugrass, bahiagrass or lippia lawns and turf.

Do not apply an organophosphate or carbamate insecticide within seven days of an application of this product as turf injury may occur.

---

## APPLICATION INSTRUCTIONS

---

### NEWLY SEEDED OR OVER SEEDED AREAS

Mesotrione applied at planting prevents the emergence of crabgrass seedlings and controls broadleaf weeds without harming desirable turf grasses listed below. Turfgrass and lawns may be seeded and weeds controlled at the same time. Apply mesotrione impregnated on fertilizer as the last step in the planting process.

7/9

**Spring Seeding:** For control of crabgrass, common chickweed, mouse ear chickweed, henbit, corn speedwell, hairy bittercress, heal-all, woodsorrel, dollar weed, volunteer bentgrass, dandelion, white clover, black medic, hop clover, nimblewill, ground ivy, broadleaf plantain, buckhorn plantain, Carolina plantain, hedgeweed, old world diamond flower, tufted lovegrass, Shepherd's purse, Florida pusley, common purslane, common lambsquarters, pigweed, kochia, wild violets, and other broadleaf weeds, apply 180 pounds of fertilizer (0.15 pounds active ingredient per acre of mesotrione impregnated on fertilizer) per acre of turf. Apply to newly seeded or to over-seeded established plantings of the following grasses: Kentucky bluegrass, tall fescue, fine, spreading creeping and red fescues, and perennial ryegrass. Mesotrione may reduce the density of fine fescue seedlings. Mesotrione can be used on grass seed blends that contain less than 20% by weight of fine, spreading, creeping or red fescues.

For extended control of weeds listed above, a second application of 0.08% mesotrione on fertilizer can be applied six weeks after the first application. A second application will aid in control of dandelion and perennials such as clover, ground ivy, and volunteer bentgrass. For extended season long control of crabgrass and foxtail, apply mesotrione in combination with a preemergence herbicide such as Barricade® 65WG Herbicide.

**Fall Seeding:** For control of crabgrass, common chickweed, mouse ear chickweed, henbit, corn speedwell, hairy bittercress, heal-all, knawel, woodsorrel, dollar weed, volunteer bentgrass, dandelion, white clover, black medic, hop clover, nimblewill, ground ivy, broadleaf plantain, buckhorn plantain, Carolina plantain, hedgeweed, old world diamond flower, knotweed, tufted love grass, Shepherd's purse, Florida pusley, common purslane, common lambsquarters, pigweed, kochia, wild violets, knotweed, and other broadleaf weeds, apply 180 pounds of fertilizer (0.15 pounds active ingredient per acre of mesotrione impregnated on fertilizer) per acre of turf. Apply to newly seeded or to over-seeded established plantings of the following grasses: Kentucky bluegrass, tall fescue, fine, spreading and creeping red fescue, and perennial ryegrass. Mesotrione may reduce density of fine fescue seedlings. Mesotrione can be used on grass seed blends that contain less than 20% by weight of fine, spreading, creeping or red fescues.

**WHAT TO EXPECT:** Weed stems and leaves will begin to turn white within a few days of treatment. Weeds will turn brown and die. Two to three weeks may be required for complete control. Weeds not killed are often stunted and non-competitive in turf with flowering disrupted.

**SPREADER TIPS [optional]**

Spreader Settings:

- Scotts Drop Spreader [XX]
- Scotts Easy Green Rotary [XX]
- Scotts Speedy Green Rotary [XX]
- Cyclone Rotary [XX]
- Central Drop [XX]
- Sears Drop [XX]
- Ortho Drop [XX]
- Green View Drop [XX]
- Precision Drop [XX]

For best results the product should be applied without skips or misses. Determine the correct amount of product for the turf area to be treated. For best results apply half the rate in one direction and the remaining half rate at right angles to the first application. This procedure will minimize the chances for color streaking and erratic weed control.

8/9

---

### STORAGE AND DISPOSAL

---

[For agricultural (sod farm) use product:] Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in a dry place.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned stay out of smoke.

[For consumer product:]

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

**Pesticide Storage:** Store in a dry place.

**Pesticide Disposal and Container Disposal:** If empty do not reuse this container. Place in trash or offer for recycling if available. If partly filled call your local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

---

### CONDITIONS OF SALE AND LIMITATION 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, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA 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, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES**



9/9

**(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 SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

---

©200\_ Syngenta

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:  
Syngenta Crop Protection, Inc.  
P. O. Box 18300  
Greensboro, North Carolina 27419  
[www.syngenta-us.com](http://www.syngenta-us.com)

0.08% Mesotrione on Fertilizer – bb – 11/01/08  
000100-XXXXX.20071102.008MESOFERT-AMEND-1107.pdf

008 MESO FERT 1266 AMEND FEB2008 CLEAN – pd – 02/22/08  
000100-01266.20080222.008MESOFERT-AMEND-FEB2008.pdf