MEMORANDUM

To: Active Ingredients Book, PPRS Staff

From: Paula McBath

Re: Registration Decision Tree Update for Bifenthrin Products

Date: March 19, 2004

Routine product applications which contain the active ingredient bifenthrin should have New York State specific language on the label as described below:

Review of the bifenthrin documents found in the active ingredients book, chemical file, and specific product files, would indicate that the products of concern that contain this ingredient are granular formulations used in applications on turf such as in golf courses, recreational areas, and commercial lawn management, agricultural uses including sod farms and homeowner products. If granules which contain either of these active ingredients, do not get watered into the soil but instead are washed into a nearby water body, the chemicals would be extremely toxic to fish and aquatic invertebrates, especially marine fish and invertebrates.

There are many homeowner products which have indoor/outdoor use patterns, are packaged in small quantity (less than 1 gallon), and are ready-to-use sprays for crack and crevice treatment and for outdoor surfaces such as screens, doors, ant trails, shrubbery, porches, etc. The package size and use pattern would limit these products from being misused. Therefore, these homeowner products do not need to have New York State required language, but should contain an Environmental Hazard Statement regarding toxicity to fish/ no application to water.

There are granular formulations (50 lbs. or less) containing bifenthrin that are being marketed for homeowner use. These labels must have “For Homeowner Use Only” or similar statement on the front panel of the product label. These homeowner products require NYS specific language as follows:

1. “In New York State, this product may not be applied to turf within 100 feet of a coastal marsh.” (or of a water body (lake, pond, river, stream, wetland or drainage ditch).

2. “In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.”
Granular bifenthrin lawn and turf commercial use products are typically either federally restricted or require application under the supervision of a licensed applicator (restricted “E” or “G”) have a maximum application rate of 0.4 lb a.i. per acre per year and must have New York State specific language as listed below.

- “In New York State, this product may not be applied to turf within 100 feet of a coastal marsh.” (or of a water body (lake, pond, river, stream, wetland or drainage ditch).

- “In New York State, do make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.”

In addition, if the product is for use on golf courses or sod farms, there should be a specific statement on the front panel of the product label and in bold letters as follows:

- “DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK”

Please see attached, a federal label which lists golf courses and sod farms as use sites and includes all three New York State required text items. Note label positions for each item.
RESTRICTED USE PESTICIDE
Toxic to Fish and Aquatic Organisms

For retail sale to and use only by certified applicators, or persons under their direct supervision and only for those uses covered by the certified applicator's certification.

1683

Net Contents

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAR 19 2003

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
279-3167

Talstar®
GC Granular
INSECTICIDE

For use to control Ants (including Imported Fire Ants), Mole Crickets and other insect pests on lawns in landscaped areas and perimeters around residential, institutional, public, commercial and industrial buildings, parks, recreational areas, golf courses, sod farms and athletic fields.

[Insert photo of golf course]

EPA Reg. No. 279-3167
EPA Est. 279-

Active Ingredient:
Bifenthrin*.................................0.2%
Inert Ingredients........................99.8%

100.0%

*Col isomers 97% minimum, trans isomers 3% maximum.
U.S. Patent No. 4,238,505

KEEP OUT OF REACH OF CHILDREN
CAUTION

See other panels for additional precautionary information.

DO NOT USE THIS PRODUCT ON GOLF COURSES AND SOD FARMS IN NASSAU COUNTY OR SUFFOLK COUNTY, NEW YORK.

FMC Corporation
Agricultural Products Group
Philadelphia PA 19103

2003 Risk Assessment Label Issue

FIRST AID

If on skin or clothing
• Take off contaminated clothing.
• Rinse skin immediately with plenty of water for 15-20 minutes.
• Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

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 Assistance.

NOTE TO PHYSICIAN

This product is a pyrethroid. If large amounts have been ingested, milk, cream and other digestible fats and oils may increase absorption and so should be avoided.

For Information Regarding the Use of this Product Call 1-800-321-1FMC (3962).

PRECAUTIONARY STATEMENTS
Hazards to Humans (and Domestic Animals)

Caution
Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

The following Personal Protective Equipment requirements apply to sod farm use only

Personal Protective Equipment:
Applicators and other handlers must wear:
• Long sleeved shirt and long pants
• Waterproof gloves
• Shoes and socks

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:
• 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 extremely toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washings or rinsates.

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 by air.
Do not broadcast apply more than 0.4 lbs. A.I. (200 lbs. Talstar GC Granular) per Acre per year.
Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds.

Not for use on nurseries, commercial greenhouses or grass grown for seed.

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

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.
Do not enter or allow worker entry to treated areas during the required entry interval (REI) of 12 hours.
Coveralls over long-sleeved shirt and long pants.
Chemical-resistant gloves, such as neoprene or butyl rubber.
Waterproof gloves.
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 Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.
If watering-in of the granules is necessary, do not allow people or pets on treated areas until the grass or soil is dry.
Do not touch treated surface until dry.

GRASS AND PERIMETER APPLICATIONS
(Including Golf Courses and Sod Farms)

Grass Application: Broadcast Talstar® GC Granular Insecticide with suitable application equipment to ensure uniform coverage over the treatment area.

APPLICATION RATES
The application rates listed in the following table will provide excellent control of the respective pests under typical conditions. However, at the discretion of the applicator, Talstar GC may be applied at up to 0.4 lb A.I/A to control each of the pests listed in this table. However, for residential lawn use, do not apply more than 0.2 lbs. A.I. per Acre per application.

<table>
<thead>
<tr>
<th>Pest</th>
<th>Active ingredient</th>
<th>Application Rate</th>
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<tbody>
<tr>
<td>Armyworms¹</td>
<td>0.1 lbs. A.I/A</td>
<td>50 lbs. per acre</td>
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<tr>
<td>Cutworms²</td>
<td>0.1 - 0.2 lbs. A.I/A</td>
<td>50 - 100 lbs. per acre</td>
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<tr>
<td>Sod Webworm³</td>
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<tr>
<td>Annual Bluegrass Weevil (Hyperodes) (Adult)²</td>
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<tr>
<td>Black Turfgrass Atanyis (Adult)⁴</td>
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<tr>
<td>Meadowgrass Leathopppers</td>
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<tr>
<td>Ants</td>
<td>0.2 - 0.4 lbs. A.I/A</td>
<td>100 - 200 lbs. per acre</td>
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<tr>
<td>Centipedes</td>
<td></td>
<td></td>
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<tr>
<td>Chinch Bugs³</td>
<td></td>
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</tr>
<tr>
<td>Fleas (Adults)⁴</td>
<td></td>
<td></td>
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<tr>
<td>Fleas (Larvae)⁴</td>
<td></td>
<td></td>
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<tr>
<td>Imported Fire Ants (Adult)⁴</td>
<td></td>
<td></td>
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<tr>
<td>Imported Fire Ants (Mounds)⁴</td>
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<tr>
<td>Millipedes</td>
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<tr>
<td>Mole Cricket (Adult)⁴</td>
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</tr>
<tr>
<td>Mole Cricket (Nymph)⁴</td>
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<tr>
<td>Ticks⁴</td>
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</tr>
<tr>
<td>Pillbugs</td>
<td>0.4 lbs. A.I/A</td>
<td>200 lbs. per acre</td>
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<tr>
<td>Sawbugs</td>
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</tbody>
</table>

In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).
In New York State, do make a single repeat application of Talstar GC Granular if there are signs of renewed insect activity, but not sooner than two weeks after the first application.