Mobay Chemical Corporation
Agricultural Chemicals Division
P.O. Box 4913
Kansas City, MO 64120

Gentlemen:

Subject: Oftanol 2 Flowable
EPA Registration No. 3125-342
Your Labels Submitted September 4 and October 17, 1990

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable provided you submit five (5) copies of your final printed labeling incorporating the following correction before you release the product for shipment.

- To preclude possible misuse of the product, add the following statement to the directions for use on nursery stock ornamental beds and container grown ornamentals:

For Outdoor Use Only

If this condition is not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of this condition.

A stamped copy of each label is enclosed for your records.
A copy of the Toxicology Branch's review of the additional information submitted for the 21-day dermal study in rats is also enclosed for your records. The study is acceptable and has been upgraded to core minimum.

Sincerely yours,

Marilyn A. Mautz
Acting Product Manager (16)
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Enclosures
Reason to Issue: To propose use on ornamentals and nurseries, and on certain non-crop areas; 4/3/85
Draft: to specify additional areas to be treated.

© OFTANOL

2 Insecticide

FOR COMMERCIAL APPLICATOR USE ONLY

FOR INSECT CONTROL ON
TURF GRASSES, ORNAMENTAL
BEDS AND NURSERIES

ACTIVE INGREDIENT:
1-Methylethyl 2-[(ethoxy[(1-
methylethyl)amino]phosphino-
thioyl]oxy]benzoate* ........ 22%
INERT INGREDIENTS .............. 78%
100%

Contains 2 lbs. 1-Methylethyl
2-[(ethoxy[(1-methylethyl)am-
ino]phosphinothioyl]oxy]benzoate
per gallon.

*U.S. Patent No. 3,621,082
Canadian Patent No. 825,198
EPA Est. 3125-MO-1
EPA Reg. No. 3125-342

STOP - READ THE LABEL BEFORE USE

KEEP OUT OF REACH OF CHILDREN

WARNING

See Side Panel for Statements of Practical Treatment and Other Precautionary Statements

NET CONTENTS _______ GALLONS

MOBAY CHEMICAL CORPORATION
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Mo. 64120
PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed, inhaled, or absorbed through the skin. Causes eye irritation. Do not get in eyes, on skin or clothing, or breathe spray mist. Wear protective clothing, natural rubber gloves, and goggles when handling.

Do not contaminate feed or food. Keep out of reach of children. Keep all unprotected persons out of the operating area. Wash hands, arms, and face thoroughly with soap and warm water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

STATEMENTS OF PRACTICAL TREATMENT

In case of poisoning, call a physician immediately. Have patient lie down and keep quiet. If swallowed, vomiting should be induced. Administer water freely and induce vomiting by giving the dose (1/2 oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If in eyes, wash with flowing water for at least 15 minutes. Get medical attention if irritation persists. If inhaled, remove victim to fresh air. If not breathing give artificial respiration, preferably mouth to mouth.


TO PHYSICIAN:

ANTIDOTE - Atropine sulfate or atropine sulfate plus 2-PAM has a slight antidotal effect and should be administered in therapeutic doses. Repeat as necessary to the point of tolerance.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply directly to water or wetlands. Keep out of lakes, streams, and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.
AVISO
PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you).

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

IMPORTANT: Read these entire Directions for Use and Conditions of Sale before using OFTANOL 2 Insecticide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. INSUFFICIENT CONTROL OF PESTS AND/OR INJURY TO THE CROP TO WHICH THE PRODUCT IS APPLIED MAY RESULT FROM THE OCCURRENCE OF EXTRAORDINARY OR UNUSUAL WEATHER, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

OFTANOL 2 Insecticide is recommended for use only by commercial applicators on ornamental, recreational and commercial turf including golf courses, cemeteries, sod farms, industrial grounds, parkways, and residential lawns, as well as ornamental beds and nurseries.

APPLICATION EQUIPMENT

Apply OFTANOL 2 Insecticide over the treatment area with suitable equipment to provide uniform coverage. Apply OFTANOL 2 Insecticide in a coarse, low pressure spray using accurately calibrated equipment to apply the proper amount of spray, and check calibration periodically to ensure that equipment is working properly.
### RECOMMENDED APPLICATIONS

<table>
<thead>
<tr>
<th>CROP</th>
<th>PEST</th>
<th>DOSAGE</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Insects</td>
<td>White grub larvae (such as Japanese beetle, Black turf grass ataenius, Chafers, <em>Phyllophaga</em> spp., Green June beetle, Oriental beetle)</td>
<td>1 gal/acre or 3 fl. oz./1000 sq. ft.</td>
<td>Be Sure to Read &quot;APPLICATION EQUIPMENT&quot; Section of this label. Apply specified dosage in sufficient volume of water to provide uniform distribution of OPTANOL 2 Insecticide. Minimum interval between applications must be 30 days. Do not apply more than 2 gallons of OPTANOL 2 Insecticide per acre per year or an equivalent amount of 4 lbs. of active ingredient per acre per year, regardless of formulation used. For White Grub Larvae and Billbug Larvae Control: Water turf area thoroughly within 12 hours of application using sufficient water to wet soil 1 to 1 1/2 inches deep. For <em>Hyperodes</em> Weevil Larvae Control: Apply between full bloom periods of forsythia and flowering dogwood, usually April 15 to May 15, and water-in as for white grub larvae. For <em>Fire ants</em> Mole crickets</td>
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</table>

Consult your local turf, State Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.
**OFTANOL 2 Insecticide**

**RECOMMENDED APPLICATIONS (Continued)**

<table>
<thead>
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<tr>
<td>Turf grasses</td>
<td>SURFACE INSECTS</td>
<td>2 or 4 qts. per acre</td>
<td>Apply 1/4 inch of water within 12 hours of treatment. Re-apply as necessary for pest re-infestations. Do not apply more than 2 gallons of OFTANOL 2 Insecticide per acre per year or an equivalent amount of 4 lbs. of active ingredient per acre per year, regardless of formulation used. Minimum interval between applications is 15 days for the 2 qt. rate and 30 days for the 4 qt. rate. Consult your local turf, state Agricultural Experiment Station, or state Extension Service Specialists for more specific information regarding timing of application.</td>
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<td>Sod webworm larvae</td>
<td>1.5 or 3 fl. oz./1000 sq/ft.</td>
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<td>Chinch bug</td>
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<td></td>
<td>Billbugs (Adult stage)</td>
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<td></td>
<td>Flea beetle</td>
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<tr>
<td>Ornamental areas (such as nursery stock and ornamental beds)</td>
<td>SOIL INSECTS</td>
<td>1 gal/A or 3 fl. oz./1000 sq. ft.</td>
<td>Apply specified dosage in sufficient volume of water to provide uniform distribution of OFTANOL 2 Insecticide. Minimum interval between applications must be 30 days.</td>
</tr>
<tr>
<td></td>
<td>White grub larvae (such as Japanese beetle, Black turf grass ataenius, Chafer, Phyllophaga spp., Green June beetle, Oriental beetle, Asiatic garden beetle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Billbug (Larval stage)</td>
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<td></td>
<td>Hyperodes weevil (Larval stage)</td>
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<td></td>
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<tr>
<td></td>
<td>Mole crickets</td>
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<tr>
<td></td>
<td>Fire ants</td>
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</tbody>
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* Due to the fact that all species of ornamental plants have not been subjected to foliar phytotoxicity testing, do not allow spray or drench solution to come into contact with the foliage portion of the plant. (Continued on next page)
### RECOMMENDED APPLICATIONS (Continued)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Ornamental areas (Continued)</td>
<td>Mole crickets</td>
<td>1 gal/ A1000 sq. ft.</td>
<td>For Area Mole Cricket and Fire Ant Control: Apply specified dosage uniformly over area to be treated in sufficient water to thoroughly wet foliage. Water immediately after application using 1/2 to 1 inch of water. If established fire ant mounds are present use the mound drench treatment prior to area application. If a mound drench treatment is made only one area treatment may be made.</td>
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<tr>
<td>(such as nursery stock and ornamental beds)</td>
<td>Fire ants</td>
<td>3 fl oz./ 1000 sq. ft.</td>
<td></td>
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<tr>
<td>Fire ants</td>
<td></td>
<td>1 ml. per 3 gallons of water</td>
<td>Established Fire Ant Mounds - Drench Treatments: Wet Conditions: Thoroughly drench mound and surrounding 9 square foot area by gently sprinkling with the 3 gallons of mixture. Dry Conditions: Treat as noted for wet conditions, however, to insure penetration apply an additional 3 gallons of water to the treated mound area after treatment. Make only one mound drench treatment.</td>
</tr>
</tbody>
</table>

Consult your local turf, State Agricultural Experiment Station, or State Extension Service Specialists for more specific information regarding timing of application.

### RESTRICTIONS

Water grass thoroughly after application. Keep children and pets off treated area until foliage has dried.

Do not mow treated turf area before rainfall or irrigation has been applied as per directions for use. Do not graze treated areas or use clippings from treated areas for feed or forage.

### STORAGE AND DISPOSAL

Not for Storage in or Around the House

**Pesticide Disposal:** Do not contaminate water, food, or feed by storage or 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.

**Container Disposal:** Do not use container in any connection with feed, food, or drinking water. Triple rinse (or equivalent). Dispose of in a sanitary landfill, or by incineration if allowed by state and local authorities.
STORAGE AND DISPOSAL (Cont'd)

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, dam up spilled material to prevent runoff. Absorb material with absorbing type compounds and dispose of as directed for pesticides above.

OFTANOL is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.
**OFTANOL®**
2 Insecticide

**ACTIVE INGREDIENT:**
1-Methylethyl 2-[[ethoxy[(1-methylethyl)amino]phosphinothioyl]oxy]benzoate .......... 22%

**INERT INGREDIENTS** .......... 78%

**100%**

**AMENDMENT**
To Previously Registered Labeling

Add the Following:

**RECOMMENDED APPLICATIONS FOR NURSERY STOCK**
**TO MEET QUARANTINE CERTIFICATION REQUIREMENTS**

<table>
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<tr>
<td>Container grown ornamentals</td>
<td>White grub larvae (such as Japanese beetle larvae)</td>
<td>3.7 fl oz</td>
<td>Apply as a drench at the rate of 1 gal of solution per 1.6 cubic feet of growing media, or use 100 gal of solution to treat 6 cubic yards of growing media. Treatments should be made <strong>after</strong> containers have been filled with growing media and plants have been placed in the container. Thoroughly drench the container so that all the growing media is treated taking care not to contact foliage with solution.* Make only one application per container per year. Apply to container grown stock only. Do not allow excessive runoff of treatment solution to occur.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*Due to the fact that all species of ornamental plants have not been subjected to foliar phytotoxicity testing, do not allow drench solution to come into contact with the foliage portion of the plant.</td>
</tr>
</tbody>
</table>

*Date of Draft: 10/9/90 (Pre-Reg) (S)  
Supersedes Pre-Reg Draft Dated: 9/18/90  
EPA Reg. No. 3125-342  
U.S. LABEL  

**ACCEPTED with COMMENTS**
In EPA Letter Dated:  3/25-3/2 

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