

Reg # 37100-27

PM-17

file 6



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

May 18 1994

DR. ARTHUR H. TOMERLIN
DUPHAR CROP PROTECTION INC.
AGENT FOR: DUPHAR CROP PROTECTION
549 WEST LAKE MARY BLVD.
LAKE MARY, FL. 32746

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 10/15/93 in Response to PR Notice 93-7
EPA Reg. No. 37100-27
DIMILIN-2F

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Candia Ink on paper that
contains at least 50% recycled fiber

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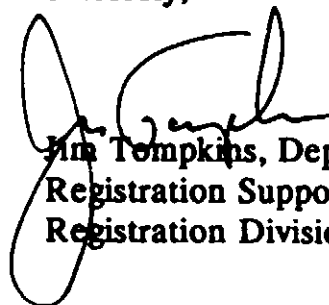
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

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Dr Arthur H Tomerlin
DUPHAR CROP PROTECTION INC
AGENT FOR: DUPHAR CROP PROTECTION, INC
549 WEST LAKE MARY BLVD
LAKE MARY FL 32746

Comment for: EPA Reg Nr.37100-27
DIMILIN - 2F

The following specific comments pertain to your WPS
labeling submission concerning the product
cited above:

No comments

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RESTRICTED USE PESTICIDE
Due to toxicity to aquatic invertebrate animals.
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.

DIMILIN® 2F

INSECT GROWTH REGULATOR

ACCEPTED
with COMMENTS
in EPA Letter Dated

NOV 18 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
37100-27

COMPOSITION

Active Ingredient: (% by weight)	
N-[[[4-Chlorophenyl]amino]carbonyl]-2,6-difluorobenzamide*	24.0%
Inert Ingredients:	76.0%
TOTAL	100.0%

*Diflubenzuron and other benzoylphenylurea insecticidal compounds, and compositions relating thereto, are covered by U.S. Patent Numbers RE33,615; 3,989,842; 4,013,717; 4,110,469; 4,166,124; 4,607,044; 4,833,151; 4,920,153

and other patents pending.

*Contains 2 lbs. diflubenzuron per gallon.

SOLVAY DUPHAR B.V. C.J. Van Houtanlaan, 30
1381 CP, Weesp, The Netherlands

EPA REG. NO. 37100-27
EPA EST. NO.

004WPS

Net Contents:

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Avoid contact with skin. Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions in Some Individuals. Avoid contamination of feed and foodstuffs.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and Other Handlers Must Wear: A long-sleeved shirt & long pants; shoes plus socks.

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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the 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.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to crab, shrimp and other aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

BEST AVAILABLE COPY

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 through any type of irrigation system.

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 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 into treated areas during the restricted entry interval (REI) of 12 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
- waterproof gloves
- shoes plus socks.

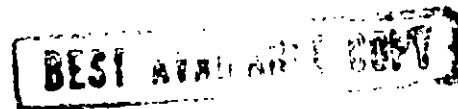
**DIRECTIONS FOR USE
FORESTS, TREES AND SHRUBS**

DIMILIN 2F will control larvae of gypsy moth, forest tent caterpillar, Nantucket pine tip moth and tussock moth in forests trees and shrubs.

Action of DIMILIN 2F is slow because it disrupts the normal molting process of insect larvae. In most instances, several days may be needed before full effect can be seen. DIMILIN 2F applied at label rates does not affect bees or other beneficial insects.

DIMILIN 2F may be used to protect trees and shrubs such as in:

- Forests
- Residential, municipal and shade tree areas
- Recreational areas such as campgrounds, golf courses, parks, parkways
- Ornamental, shade tree, and forest nurseries
- Forest plantings
- Shelterbelts
- Rights of way and other easements



Insect	Rate DIMILIN 2F Per Acre	Timing	Spray Volume Per Acre-Gallons ^{1,2}		
			Aerial	Air Blast	Hydraulic
Gypsy Moth ³	1 - 4 fl. oz.	Early instar (1st, 2nd, or 3rd) preferred, but prior to full leaf expansion.	0.5 - 2.5	5 - 20	100 - 400
Forest Tent Caterpillar	2 - 8 fl. oz.	Early instar (1st, 2nd, or 3rd) preferred, but prior to full leaf expansion.	1.0 - 2.0	5 - 20	100 - 400
Nantucket Pine Tip Moth	4 fl. oz.	Early instar or when 75% of pupal cases are empty.	2.0 - 5.0	5 - 30 ⁴	100 - 400
Tussock Moth	4 - 8 fl. oz.	Early instar	1.0 - 2.0	5 - 20	100 - 400

1. Uniform coverage of the foliage is essential. The higher volumes are recommended for mature or very large or dense tree stands or high population pressures. The higher water volumes in aerial application should be used when conditions of application are less than ideal and/or after larvae have reached 3rd instar.

2. Continuous agitation during mixing and application is required to maintain suspension of DIMILIN 2F. Do not use equipment without adequate agitation.

3. Gypsy Moth - To provide maximum protection from defoliation and reduce egg mass deposition, treatment can begin at 5 to 20% leaf expansion provided egg hatch is underway. Because of its slowness of action applications, later than 3rd instar may result in reduced foliage protection. Higher rates of DIMILIN 2F should be used if larvae have reached 3rd or 4th instar.

If it is determined that a single spray of 1 to 2 fluid ounces of DIMILIN 2F per acre does not result in adequate control of gypsy moth larvae, a second application may be made seven to fourteen days later. Do not

exceed 4 fl. oz. DIMILIN 2F per acre per season for gypsy moth or Nantucket pine tip moth. Do not exceed 8 fl. oz. DIMILIN 2F per acre per season for control of forest tent caterpillar or tussock moth.

4. Use 5 to 15 gallons per acre if trees are less than 3½ feet tall. Use 15 to 30 gallons per acre for taller trees. Application should be made at peak emergence which can be determined by twig sampling, pheromone traps, degree days, etc.

In campground or other recreational areas, application should be made during period of minimal use. Notify persons using recreational facilities or living in the area to be sprayed before application of this or any other pesticide.

QUARANTINE PROGRAMS (Gypsy Moth)

For use in Quarantine programs conducted by State Cooperators as well as USDA personnel of both Plant Protection and Quarantine, APHIS and the U.S. Forest Service. For use in eradication of isolated infestations make two applications of 1 to 2 fluid ounces of DIMILIN 2F per acre 7-

14 days apart. For use in quarantine programs involving the movement of nursery stock from infested to non-infested areas, make two applications of 1 to 2 fluid ounces of DIMILIN 2F per acre 7-14 days apart on nursery stock.

COTTON

BEET ARMYWORM AND FALL ARMYWORM: Apply 4 to 8 fl. oz. of DIMILIN 2F per acre. Use sufficient water to assure adequate coverage. 1 to 2 quarts of emulsifiable vegetable or paraffinic crop oil may be used to enhance canopy penetration. Application should be made during early stages of armyworm larval development. Based on DIMILIN's unique mode of action, full mortality effects may be delayed for 3 to 5 days following application. Do not apply more than 24 fl. oz. of DIMILIN 2F per acre during one growing season. Do not apply after bolls begin to open.

Aerial application: Apply in 2 to 3 gallons total volume per acre.

Ground application: Apply in 5 to 30 gallons of total volume per acre to give uniform coverage.

BOLL WEEVIL

DIMILIN 2F will control boll weevil through reproduction suppression. Apply 4 to 8 fluid ounces of DIMILIN 2F per acre per treatment in combination with 2 to 4 quarts of emulsifiable vegetable or paraffinic crop oil. Consult your supplier or Uniroyal representative for oil specifications. In California do not apply in oil without water.

Aerial application: Apply in 2 to 3 gallons total volume per acre.

Ground application: Apply in 5 to 30 gallons of total volume per acre to give uniform coverage.

Mixing directions if used with water

1. Fill tank with half of the required amount of water.
2. Begin agitation and add required amount of DIMILIN 2F.
3. Continue agitation while adding remainder of water.
4. Add proper quantity of oil slowly. To avoid formation of an invert emulsion, use at least 2 parts of water for each part of oil.

Mixing directions if used without water:

1. Fill tank with the required amount of oil
2. Begin agitation and add required amount of DIMILIN 2F.

Aerial or Ground Applications: Spray should be applied with aerial or ground equipment designed or modified to insure full uniform coverage of the entire plant. Equipment adjusted to provide droplets with a diameter 150 to 220 microns is recommended. Provide agitation prior to, during, and after blending and while applying.

For maximum control of boll weevil reproduction, make first application at pinhead square stage of cotton growth when overwintering boll weevils are entering the fields. Repeat treatments should allow at least 5 to 7 day intervals between applications. Do not make more than 6 applications and do not apply more than 1.5 pounds of DIMILIN 2F per acre during one growing season. Do not apply after bolls begin to open. DIMILIN 2F does not kill the adult boll weevils, however, eggs deposited by treated female weevils will not hatch, thus limiting reproduction. The control of egg hatch and larval development within the square prevents its shedding and will then allow normal boll development. After initial treatment of the female weevil, 7 to 10 days are required before non-hatching eggs are laid.

When used for boll weevil control, DIMILIN 2F allows normal build-up of beneficial insects which may aid in control of bollworm and budworm. Emulsifiable concentrate insecticide formulations used in tank mixes, in the presence of oil, may result in phytotoxicity. Care should be taken where such mixture is used.

RESTRICTIONS ON ROTATIONAL CROPS: Do not plant food or feed crops in DIMILIN treated soils within 6 months following last application, unless DIMILIN is authorized for use on these crops.

STORAGE AND DISPOSAL

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

STORAGE - Store in a dry location.

PESTICIDE DISPOSAL - Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or 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.

IMPORTANT NOTICE — Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

DIMILIN® is a Registered Trademark of Solvay Duphar B.V., Weesp, the Netherlands