



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

NOV - 5 1999

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Ms. Luz G. Piwonka  
Drexel Chemical Company  
P.O. Box 13327  
Memphis, TN 38113-0327

Dear Ms. Piwonka:

Subject: Correction/Amendment of Conditional Registration  
Drexel Flumetralin 15%  
EPA Reg No 19713-510  
Communication Between Registrant and Agency Personnel Regarding Agency  
Letter Dated October 12, 1999.

The registration record of the subject product has been amended as indicated below. The item numbers refer to those in Agency letter dated October 12, 1999 (Notice of Pesticide Registration-Conditional).

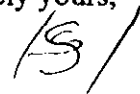
*Item 2a.* The EPA Registration Number has been amended to read, "EPA Reg No 19713-510." Therefore, the labeling should be modified accordingly.

*Items 2d. & 2e.* The product Paarlan® is currently canceled. Therefore, it does not have to be added to the label.

All other items remain in place and are still required. As previously indicated in the subject Agency letter, this product is conditionally registered in accordance to FIFRA section 3(c)(7)(A) provided that you comply with all the specifications. If the 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 constitutes acceptance of the conditions.

A newly-stamped copy of the label is enclosed for your records. If you have any questions regarding this letter, do not hesitate to contact me at 703-305-7740 or María I. Rodríguez of my staff at 703-305-6710.

Sincerely yours,



Cynthia Giles-Parker  
Product Manager #22  
Fungicide Branch  
Registration Division (7505C)

Enclosure



ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

3/4  
1999  
5/10

NOV 5 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No. 19713-

# Flumetralin 15%

## Plant Growth Regulator

For control of Tobacco suckers.

### ACTIVE INGREDIENT:

2-chloro-N-[2,6-dinitro-4-(trifluoromethyl)phenyl]- N-ethyl-6-fluorobenzenemethanamine	13.7%
OTHER INGREDIENTS:	86.3%
TOTAL:	100.0%

Contains 1.2 pounds of active ingredient per gallon.

## KEEP OUT OF REACH OF CHILDREN WARNING / AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See FIRST AID Below

EPA Reg. No. 19713-\_\_\_\_\_

EPA Est. No. \_\_\_\_\_ Net Contents: \_\_\_\_\_

### FIRST AID

**IF IN EYES:** Hold eyelids open and flush with a steady, gentle stream of water. Get medical attention.

**IF SWALLOWED:** Immediately call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, large quantities of water. Avoid alcohol. Do not give anything by mouth to an unconscious person.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**NOTE TO PHYSICIAN:** If ingested, lavage stomach with care to avoid aspiration. Treat symptomatically.

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans and Domestic Animals

**WARNING:** Causes skin irritation and moderate eye injury. Harmful if swallowed or absorbed through skin. Prolonged or repeated contact may cause sensitizing (allergic) reactions in some people. Avoid contact with eyes. Do not get on skin or on clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category G on an EPA chemical resistance category selection chart. Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves, such as Barrier laminate or Viton, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure and chemical-resistant apron, when cleaning equipment, mixing or loading. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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.

#### ENGINEERING CONTROL STATEMENTS

When handlers use closed systems or enclosed cabs 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: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing immediately if pesticide gets inside. 3) Then wash thoroughly and put on clean clothing.

### ENVIRONMENTAL HAZARDS

This product is toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by disposal of equipment was water.

### 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.

### 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, 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), restricted entry interval (REI) and notification to workers. 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 of 24 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 over short-sleeved shirt and short pants, chemical-resistant gloves, such as Barrier laminate or Viton, chemical-resistant footwear plus socks and chemical-resistant headgear for overhead exposure.

### FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR SUCKER CONTROL AND/OR CROP INJURY.

Do not apply this product through any type of irrigation system.

### GENERAL INFORMATION

Flumetralin 15% is a plant growth regulator for the control of sucker growth on Burley, Cigar, Dark, Flue-cured and Maryland tobacco. One application of this product will provide full season control of excessive sucker development in Tobacco. Read this label carefully and observe all directions and precautions.

### MIXING INSTRUCTIONS

Mix 1 gallon of this product in 49 gallons of water or 2.2 fluid ounces of this product per 1 gallon of water. Provide sufficient agitation during mixing and application to maintain a uniform mixture.

Note: Do not mix this product with insecticides or fungicides.

Manufactured For:

**Drexel Chemical Company**

P.O. BOX 13327, MEMPHIS, TN 38113-0327

**SINCE 1972**

## APPLICATION INSTRUCTIONS

**Time of Application:** Apply this product when most Tobacco plants are in the elongated button to early flower stage, either before or after topping. If this product is applied after topping, apply within 24 hours of topping. During topping, remove all suckers one inch or longer from all plants. (See notes listed below.)

**Precision Hand Application:** Mix 1 gallon of this product in 49 gallons of water and apply as a coarse spray or drench to the top of the Tobacco stalk, using a hand-held drop line, or mix 2½ fluid ounces of this product per gallon of water when using the jug method or backpack sprayer. Apply only once per plant per season. Apply the spray mixture at a rate sufficient to run down the stalk, contacting each leaf axil and just reach the ground line. Excessive spray volume may result in carryover injury to rotational crops. Spray volume per plant will generally be ½ to ¾ fluid ounces depending on plant height. Do not exceed 30 gallons of spray volume per acre when using hand application methods. (See notes listed below.)

**Application with Powered Spray Equipment (3 nozzles per row):** Mix 1 gallon of this product in 49 gallons of water and apply at a rate of 30 to 50 gallons of spray volume per acre. Use the high spray volume in tall types of Tobacco, such as Burley, Cigar, Flue-cured and Maryland. Use the low spray volume only in short types of Tobacco, such as Dark. Apply only once per season. Avoid application to plants treated by precision hand application method. Spray volume should be sufficient to run down the stalk, contacting each leaf axil and just reach the ground line. Excessive spray volume beyond the point of runoff to the soil may result in carryover injury to rotational crops. (See notes listed below.)

Apply this product as a coarse spray directed downward to the top of the Tobacco stalk. This is best accomplished with 3 full cone nozzles per row, one nozzle directed downward over the center of the row and one 7 to 9 inches to each side of the center, directed at the top of the stalk. Maintain nozzles at a height of 12 to 16 inches above the top of the stalk during application. Maintain boom pressure at 20 to 25 psi, not exceeding 30 psi.

### SEQUENTIAL APPLICATION WITH MALEIC HYDRAZIDE

**Prior to Use of Maleic Hydrazide:** Mix 2 quarts of this product in 49½ gallons of water and apply either by Precision Hand Application or Application with Powered Spray Equipment as described in those sections of this label. Timing of this product should be during the elongated button to early flower stage of Tobacco.

Approximately one week after the application of this product, apply maleic hydrazide, according to directions, precautions and restrictions on that label.

**After Use of Maleic Hydrazide:** For extended control of Tobacco suckers, particularly during late Tobacco harvest in FL, GA, NC, SC and VA. First, apply the regular schedule of contacts. Follow with the labeled rate of maleic hydrazide in accordance with its label. Follow with 2 quarts of this product in sufficient water to total 50 gallons to treat one acre 3 to 4 weeks after applying maleic hydrazide, depending on the development of suckers. To increase the effectiveness of this product, add 0.25% of X-77\* (1 pint per 50 gallons) to the spray solution.

Apply this product as a coarse spray, using powered spray equipment (3 nozzles per row) at least 7 days before the next leaf harvest. The spray volume should be sufficient to run down the stalk, contacting each leaf axil where suckers are present. Refer to the "Application with Powered Spray Equipment" section for specific instructions.

#### Notes:

1. Apply this product only once per Tobacco season.
2. This product will not control large suckers. All suckers one inch or longer on all Tobacco plants must be removed before application of this product.
3. Follow all precautions, notes and other instructions on this label.

**Tank Mix with Maleic Hydrazide:** Mix 2 quarts of this product with 2 to full rate of maleic hydrazide in sufficient water to total 50 gallons and apply at the recommended time for application of maleic hydrazide. Apply the mixture as a coarse spray at a volume of 50 gallons per acre with a boom pressure maintained at 20 to 25 psi by Powered Spray Equipment as described in that section of this label. For best results, follow precautions and restrictions on this product label and maleic hydrazide labels.

**Application sequence:** 1) Apply contact material according to its label. 2) Apply the tank mixture of this product and maleic hydrazide at or near the time suggested for application of maleic hydrazide on its label. 3) Make only one application of the tank mixture of this product plus maleic hydrazide per Tobacco crop.

#### Notes:

1. Timing is important. Applications should be made at timing described above so that number and size of suckers will be small. Applications made before the elongated button stage of growth may result in chemical topping or distortion of leaves that were too immature at time of application. Spraying too late may result in poor sucker control.
2. This product will not control large suckers. All suckers one inch or longer must be removed before application of this product. Suckers that escape treatment should be removed by hand about 10 to 14 days after application.

- 4/4
3. Where a contact (fatty alcohol) is commonly used to control early suckers and provide a more uniform crop, the normal sequence would be: a) Apply contact material according to its labels, and b) about 5 days after application of contact material, apply this product. Timing of this product application should be during the elongated button to early flower stage.
  4. Where a contact (fatty alcohol) is not used and a wide range of flowering exists, early flowering plants should be topped and suckers removed by hand. Then, when most plants are in the elongated button to early flower stage, remove all suckers one inch or longer and apply this product. If this product is applied using precision hand application, early flowering plants can be topped and treated selectively; later flowering plants can be topped and treated as they reach the proper treatment stage; and a contact may not be needed.
  5. For proper sucker control, this product must contact the small suckers on the axil where the leaf and stalk connect. This product will not control suckers on plants that are leaning at time of application. Applications with powered spray equipment during windy periods are not recommended. High wind will disrupt the spray pattern of nozzles on boom sprayers and turn leaves causing improper contact and flow of the spray solution, resulting in poor sucker control. Application to wet plants or drought-stressed plants may result in poor sucker control.
  6. Carefully follow the use rates and spray volume recommended and spray field uniformly. Volume should be sufficient to run down the stalk, contact each leaf axil and just reach the ground line.
  7. Rain occurring within 2 hours after spraying may reduce effectiveness.

**PRECAUTIONS:** 1) To avoid illegal residues and possible injury to crops planted in the Fall or following Spring, do not apply excessive spray volume to the point of runoff onto the soil. This product's residues in the soil may interact with dinitroaniline herbicides, such as Balan®, Prowl® or Treflan®, to increase early season crop stunting. Thorough disking and deep tillage in the Fall are recommended where excessive amount of this product may have reached the soil. 2) When Tobacco is in a state of very rapid, succulent growth due to high nitrogen and rainfall, this product may cause injury. Under these conditions, use only the precision hand application method and avoid contacting leaves with the spray solution.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store unused product in original container only in cool, dry area out of reach of children and animals.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Wastes resulting from the use of this product are acutely hazardous. Improper disposal of unused pesticide, spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to the Federal, State or Local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office.

**CONTAINER DISPOSAL:** Do not use empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or by open burning if allowed by State and Local authorities. If burned, keep out of smoke.

Store at temperature above 32°F.

## WARRANTY—CONDITION OF SALE

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.

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