

United States Environmental Protection Agency WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

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

Product Name:

Drexalin Plus

EPA Reg. No.:

19713-510

Subject:

Revised master label

EPA Decision Number: 487316

Dear Ms. Chan:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels.

You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). You release for shipment of the product constitutes acceptance of these conditions. A stamped copy is enclosed for your records.

If you have any questions, please contact Erin Malone by phone at (703) 347-0253 or via email at malone.erin@epa.gov.

Sincerely

Shaja B. Joyner

Product Manager (20)

Fungicide Branch

Registration Division (7504P)

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Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under:



EPA. Reg. No: 19713-510

Drexalin Plus

Plant Growth Regulator

For control of Tobacco suckers.

ACTIVE INGREDIENT:

Flumetralin 13.7%

OTHER INGREDIENTS: 86.3%

TOTAL: 100.0%

Contains 1.2 pounds of active ingredient per gallon.

Contains 1.2 pounds of active ingredient per Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN CAUTION

See FIRST AID Below

FIRST AID

EPA Reg. No. 19713-510 EPA Est. No. 19713-XX-XXX

Net Content:

IF ON SKIN OR CLOTHING:

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

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- · Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Note to Physician: Contains petroleum distillate- vomiting may cause aspiration pneumonia.

510SP-0614*P

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders, applicators and other handlers must wear: Long-sleeved shirt, long pants, and shoes plus socks.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/ PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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 product is toxic to fish and aquatic invertebrates. Do not apply to water, or to areas where surface water is present, or to areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

This product has a potential for runoff for several months or more 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. In order to reduce runoff of this product, it is recommended that applications are not made within 48 hours of a predicted rainfall event. Sound erosion control practices will reduce this product's contribution to surface water contamination.

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not store or use this product near heat or open flame.

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) and restricted entry interval (REI). 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 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, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

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

PRODUCT INFORMATION

DREXALIN PLUS 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 at the 1 gallon per acre rate will provide control of excessive sucker development-in-tobacco. Read-this-label-carefully and observe-all-directions and precautions.

APPLICATION RESTRICTIONS

- Do not apply this product through any type of irrigation system.
- · Product must be applied by coarse spray.
- Do not exceed 1.2 pounds of flumetralin per acre.
- Do not replant treated areas to any crop other than tobacco within 10 months after last application of this product.

PRECAUTIONS

- 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. Residues of this product 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 amounts of this product may have reached the soil.
- 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.

MIXING INSTRUCTIONS

The diluted emulsion is most easily prepared by adding the required amount of this product into the spray tank one-half filled with water using mild agitation. Then add sufficient water to the spray tank to total the required minimum solution as specified in the "Method of Application" section.

Note: In order to minimize the possibility of injury to the tobacco plants, do not mix this product with other chemicals such as insecticides, fungicides or herbicides or apply this product to plants which have recently been treated with such chemicals.

SPRAY DRIFT MANAGEMENT

Non-target terrestrial plants can be adversely affected when exposed to this product. Avoid spray drift to non-target terrestrial plants during application.

Do not apply this product if the wind direction does not favor on-target deposition.

This product must not be applied greater than 4 feet above crop or crop canopy.

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 and remove all suckers one inch or greater from all plants.

Rate of Application

Mix 3 to 4 quarts of this product in sufficient water totaling a minimum of 50 gallons of water and apply a minimum of 50 gallons of spray volume per acre. Spray volume should be sufficient to run down the stalk, contacting all leaf axil and sucker buds. Excessive spray volume beyond the point of runoff to the soil may result in carryover injury to rotational crops.

Do not exceed 1 gallon of this product (1.2 lbs. of flumetralin) per acre.

METHODS OF APPLICATION

Precision Hand Application

Mix 1 gallon of this product in sufficient water totaling a minimum of 50 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 2.5 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 0.3 to 0.6 fluid ounce depending on plant height. Do not exceed 30 gallons of spray volume per acre when using hand application methods.

Application with Powered Spray Equipment

Broadcast Application

When applying as a broadcast spray or straight boom application, one nozzle directed over the center of the row and one nozzle directed over the center of the row-middle should be used (TG-3, TG-5 full cone tips or equivalent are recommended). A coarse spray should always be maintained using 25 to 35 psi boom pressure. By using TG-3 spray tips, spraying at 25 to 35 psi pressure and operating at a speed of 1.5 to 3 mph, an application of a minimum of 50 gallons of diluted emulsion should be applied per acre of tobacco. By using TG-5 spray tips, spraying at 25 to 35 psi pressure and operating at a speed of 3 to 5 mph, an application of a minimum of 50 gallons of diluted emulsion should be applied per acre of tobacco. Apply this product as diluted coarse spray from a height of 12 to 16 inches above the top of the stalk.

Directed Application (3 Nozzles)

When applying as a directed spray, three nozzles per row should be used (TG-3, TG-5 full cone tips or equivalent are recommended). One TG-5 nozzle should be directed downward over the center of the row and TG-3 nozzles should be 9 inches on each side directed at or slightly above the top of the stalk. It is recommended that boom pressure be kept at 20 to 25 psi and should never exceed 30 psi. By using TG-3, TG-5 spray tips, spraying at 20-25 psi pressure and operating at a speed of 2.5 to 3 mph, an application of a minimum of 50 gallons of diluting emulsion should be applied per acre of tobacco. Apply this product as diluted coarse spray from a height of 12 to 16 inches above the top of the stalk.

Use Precautions

If allowed to stand for extended periods of time, the diluted emulsion may separate and mild agitation is recommended. For all applications, always remember to mix well immediately before using. Be sure that all spray equipment has been carefully cleaned prior to using.

ADDITIONAL TREATMENT PROGRAMS

Split Applications of This Product

Mix 2 quarts of this product in sufficient water to total at least 50 gallons of water per acre and apply a minimum of 50 gallons of spray volume per acre. Follow with a second application 5 to 7 days later with a rate of 1 to 2 quarts of this product per acre. The second application may be tank mixed with maleic hydrazide (MH) based products.

Sequential Application with Products Containing Maleic Hydrazide such as Super Sucker-Stuff®, Sucker-Stuff®, or Sucker-Stuff® 80EG

Application Prior Maleic Hydrazide Treatments

Mix 2 to 4 quarts of this product in sufficient water totaling a minimum of 50 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. Five to seven days after the application of this product, apply maleic hydrazide, according to directions, precautions and restrictions on that label.

Application Following Maleic Hydrazide Treatments:

For extended control of tobacco suckers, particularly during late tobacco harvest in FL, GA, NC, SC and VA. Apply regular scheduled contacts. Follow with the labeled rate of maleic hydrazide in accordance with its label. Three to four weeks after applying maleic hydrazide, and depending on the development of suckers apply 2 to 4 quarts of this product totaling a minimum of 50 gallons per acre. Apply this product as a coarse spray, using powered spray equipment at least 7 days before the next leaf harvest. The spray volume should be sufficient to run down the stalk, contacting each leaf axil and sucker buds present. Refer to the "Application with Powered Spray Equipment" section for specific instructions.

Notes:

- 1. Apply this product only once per season when used at the 1 gallon per acre rate.
- 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 Products Containing Maleic Hydrazide such as Super Sucker-Stuff, Sucker-Stuff, or Sucker-Stuff 80EG

Mix 2 quarts of this product with the labeled rate of maleic hydrazide in sufficient water to total a minimum of 50 gallons and apply at the specified time for application of maleic hydrazide. Apply the mixture as a coarse spray totaling a minimum of 50 gallons per acre with a boom pressure maintained at 20 to 35 psi by Powered Spray Equipment as described in that section of this label. 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 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.

Tank Mix with Products Containing n-Decanol + Maleic Hydrazide such as LEVEN-38®

Tank Mixture with LEVEN-38

Leven-38 is a product containing fatty alcohol and maleic hydrazide as active ingredients. Follow precautions and label restrictions on these labels and the label of this product. Always follow the most restrictive label.

Flue Cured Tobacco

Apply this product 5 to 7 days after the last fatty alcohol contact treatment. Remove all suckers over one inch long. The plants should be sprayed within 24 hours of topping or suckering and before new sucker growth reaches one-half inch. Following two applications of a contact fatty alcohol tobacco sucker control agent such as Sucker-Plucker®, apply 3 gallons of Leven-38 plus 2 quarts of this product in sufficient water totaling a minimum of 50 gallons per acre 5 to 7 days after the second application of contact fatty alcohol. Suggested sequence: Add 3 gallons of Leven-38 and 2 quarts of this product to 10 to 20 gallons of water. With mild agitation, add more water totaling a minimum of 50 gallons. Operate the sprayer at a speed of 2.5 to not more than 5 miles per hour and spraying a minimum of 50 gallons of diluted emulsion per acre. Use a coarse spray covering the top one-third to one-half of the plant allowing the liquid to run down the stalk of each plant using 25 to 30 pounds of pressure.

Burley Tobacco

Remove by hand all suckers which are one inch or longer. The plants should be sprayed within 24 hours of topping and suckering and before suckers reach one-half inch. Apply this product in tank mixture with Leven-38 at early button stage 5 to 7 days after application of a contact fatty alcohol tobacco sucker control agent such as Sucker-Plucker. For powered spray equipment, add 3 gallons of Leven-38 and 2 quarts of this product to 10 to 20 gallons of water. With mild agitation, add more water totaling a minimum of 50 gallons. Operate the sprayer at a speed of 2.5 miles per hour to not more than 5 miles per hour and spraying a minimum of 50 gallons of diluted emulsion per acre. Use a coarse spray covering the top one-third to one-half of the plant allowing the liquid to run down the stalk of each plant using 25 to 30 pounds of pressure.

For compressed air shoulder sprayer, use 23 fluid ounces of Leven-38 and 3.75 fluid ounces of this product per 3 gallons of water. Mix well before using. Apply at a rate of 3 gallons of diluted emulsion per 667 plants, agitating the solution from time to time during spraying.

Use Restriction: Do not use contact fatty alcohols and maleic hydrazide products unless they are EPA registered.

APPLICATION NOTES

- Timing is important. Make applications at the timing specified 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 promptly following application.
- 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) within 5 to 7 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. When remaining plants are in the elongated button to early flower stage, (10 to 15 percent bloom) top and 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, hand suckered and treated selectively.

- 5. For proper sucker control, this product must contact sucker buds on the axil where the leaf and stalk connect. This product may not control suckers on plants that are leaning at time of application. Do not apply with powered spray equipment during windy periods. High wind will disrupt the spray pattern of nozzles on boom sprayers and invert 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 and should be avoided.
- 6. Carefully follow the specified use rates, spray volume and always spray field uniformly. The spray volume should be sufficient to run down the stalk, contacting each leaf axil and sucker buds present.
- 7. Rain occurring within 2 hours after spraying may reduce effectiveness.

STORAGE AND DISPOSAL

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

STORAGE: Store unused product in original container only in cool, dry area out of reach of children and animals. **Store at temperature above 32°F.** For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedure and disposal of wastes. In the event of a major spill, fire or other emergency, call CHEMTREC at 1-800-424-9300, day or night.

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 HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill_this_container. Offer_for_recycling,_if_available._Clean_container_promptly_after_emptying._Triple_rinse_as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; greater than 5 gals. up to < 250 gals.): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Refillable Container (≥ 250 Gals. & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS 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. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, neither the Manufacturer nor the Seller shall 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.

Manufactured By:



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