



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

December 18, 2020

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

Subject: Registration Review Label Mitigation for Maleic Hydrazide  
Product Name: Drexel Super Sucker-Stuff Liquid Growth Retardant  
EPA Registration Number: 19713-20  
Application Dates: 11/03/2016  
Decision Numbers: 525756

Dear Luz Chan:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Maleic Hydrazide Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Quinn Gavin by phone at 703-347-0325, or via email at [gavin.quinn@epa.gov](mailto:gavin.quinn@epa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Linda Arrington".

Linda Arrington, Branch Chief  
Risk Management and Implementation Branch 4  
Pesticide Re-Evaluation Division  
Office of Pesticide Programs

Enclosure

**ACCEPTED**

Dec 18, 2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-20



**Drexel**

# **Super Sucker-Stuff**<sup>®</sup>

Liquid Growth Retardant

For preventing growth of Tobacco suckers.

**ACTIVE INGREDIENT:**

Potassium salt of 6-hydroxy-3-(2H)-pyridazinone\* ..... 21.6%

**OTHER INGREDIENTS:** ..... 78.4%

**TOTAL:** ..... 100.0%

This product contains 1.5 pounds of maleic hydrazide acid equivalent (a.e.) per gallon.

\*Hereafter called potassium salt of maleic hydrazide.

## **KEEP OUT OF REACH OF CHILDREN CAUTION**

**See FIRST AID Below**

EPA Reg. No. 19713-20

EPA Est. No. 19713-TN-1

Net Content: \_\_\_\_\_ Gals. ( \_\_\_\_\_ L)

### **FIRST AID**

**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 do so 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.

**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 INHALED:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical information.

20SP-1220\*P

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed. Avoid breathing spray mist. Avoid contact with eyes, skin or clothing.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material including polyethylene or polyvinyl chloride, 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.

### ENGINEERING CONTROLS

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:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE 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

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 when disposing of equipment washwaters or rinsate.

**Surface Water Advisory:** Under some conditions, maleic hydrazide may have a significant potential for runoff into surface water (primarily via dissolution in runoff water) for several days post-application. Conditions favoring runoff include poorly drained soils or wet soils with readily visible slopes, frequently flooded areas, areas where an intense or sustained rainfall is forecast to occur within 48 hours, areas overlying extremely shallow groundwater and areas overlying tiled drainage systems that flow to surface 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 through any type of irrigation system. 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 (WPS), 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 WPS.

Do not enter or allow worker entry into treated areas during the REI of 12 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, including plants, soil or water is: Coveralls, chemical-resistant gloves made of any waterproof material and shoes plus socks.

### **PRODUCT INFORMATION**

SUPER SUCKER-STUFF is a plant growth inhibitor that offers a method of controlling sucker growth by keeping suckers from developing in Flue-cured, Burley, Dark-fire, Maryland and Cigar (Pennsylvania and Wisconsin) Tobacco. Since this product is absorbed and moves inside the Tobacco plant, spraying the whole plant is not necessary. Best results are obtained by spraying the upper one-third to one-half of the plant. It is important to apply equal amount of this product to each plant as labeled to obtain satisfactory control.

If Tobacco plants have been grown under drought conditions, absorption of this product will be slow and control may not be equal to plants grown under more favorable moisture conditions.

This product is not corrosive to spray equipment.

### **USE PRECAUTIONS**

- At 40°F and below, the formulation will become solid. It readily redissolves, but must be warmed to 50°F or above. The larger the container, the more time is needed to completely redissolve the precipitate.
- In order to minimize the possibility of injury to the Tobacco plants, do not mix this product with other chemicals including insecticides, fungicides or herbicides or apply this product to plants which have recently been treated with such chemicals.
- Closely hand-suckered or Tobacco treated with this product will not ripen as rapidly as poorly suckered Tobacco. Also, under some conditions, tips treated with this product have a tendency to turn yellow prematurely. This is not harmful and does not mean that your Tobacco is ripe. Therefore, do not harvest Tobacco treated with this product by using time and color of the leaves as your only guide to ripeness. Use other characteristics indicative of ripeness including (a) fading of color from midrib and (b) change in apparent leaf texture.
- Be sure that all spray equipment has been carefully cleaned prior to use.

### **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.

If allowed to stand for extended periods of time, the diluted emulsion may separate. Always remember to mix well immediately before using and maintain agitation during application.

## APPLICATION RESTRICTIONS

- Do not make more than one application per year on Tobacco. However, a single repeat application of maleic hydrazide not to exceed 6.1 pounds per acre may be made if rain occurs within 6 hours of application of this product.
- Maximum annual application rate must not exceed 4.0 gallons of this product (6.1 lbs. a.e.) per acre. **Exception:** One repeat application of maleic hydrazide not to exceed 6.1 pounds per acre is permitted if rain occurs within 6 hours of application of this product.
- Do not use on Tobacco plants grown for seed production.
- Allow at least 7 days after application of this product before harvest of Tobacco.

## APPLICATION INSTRUCTIONS

- For best Tobacco sucker control, apply this product at the proper time. Spraying too early may prevent normal development of top leaves. Spraying too late may allow some sucker growth.
- Do not spray Tobacco in the heat of day or on dry days when leaves are severely wilted. For best results, spray from mid- morning until heat of day, resuming spray applications after daytime temperature peaks subside.
- Avoid late evening or night applications of this product as dew formation on Tobacco leaf surface will produce runoff of the systemic agent in this product, thus reducing effectiveness.
- Follow rate use directions carefully. Spray field uniformly and do not use less than the minimum amount of water specified on the label.
- Should rainfall produce an occurrence of washoff within 6 hours of application to Tobacco, a single repeat application of this product may be made.

### Rate of Application

Mix 1.5 to 2 gallons of this product in sufficient water totaling a minimum of 50 gallons per acre for all types of Tobacco.

### Time of Application

#### Flue-cured, Burley, Dark Fire and Maryland Tobacco

1. If plant flowering is uniform, proceed as follows: Top Tobacco plant terminals and remove all suckers when 10 to 25% of plants are in early bloom (first flower tube to bloom). Spray this product uniformly onto the entire field within 24 hours after topping.
2. If a wide range in the time of flowering prevails, follow the following procedures:
  - a. Top early-flowering plants and remove all suckers. If no sucker control product has been applied, it is suggested that an application of a contact agent including Sucker-Plucker<sup>®</sup>, Antak<sup>®</sup> or a local systemic including Drexalin<sup>®</sup> Plus, Plucker-Plus<sup>®</sup> be applied to this Tobacco within 24 hours of topping.
  - b. Within 5 to 7 days top remaining plants, remove all suckers and apply this product within 24 hours after topping.
3. When spraying this product, avoid applications to Tobacco plants covered with dew and immediately following rainfall or irrigation. Optimum times of application are from mid-morning until noon and after daytime peak temperatures subside.
4. Avoid heat of day applications.
5. Avoid late evening or night applications of this product as dew formation on Tobacco leaf surface will produce runoff of the systemic agent in this product, thus, reducing effectiveness.

Spray Tobacco plants when tip leaves to be harvested are at least 6 inches long.



## **Pennsylvania and Wisconsin Cigar Tobacco**

1. If plant flowering is uniform, top when 25% of Tobacco plants are in early bloom (first flower tube to bloom). Spray this product uniformly onto the entire field within 24 hours after topping.
2. If plant flowering is non-uniform, top when older plants are 10 to 25% early bloom (first flower tube to bloom) and remove all suckers. If no sucker control product has been applied, it is suggested that an application of a contact agent including Sucker-Plucker, Antak or a local systemic including Drexalin Plus, Plucker-Plus be applied to this Tobacco within 24 hours of topping. Within 5 to 7 days top remaining plants, remove all suckers, and apply this product within 24 hours after topping.
3. When spraying this product, avoid applications to Tobacco plants covered with dew and immediately following rainfall or irrigation. Optimum times of application are from mid-morning until noon and after daytime peak temperatures subside.
4. Avoid heat of day applications.
5. Avoid late evening or night applications of this product as dew formation on Tobacco leaf surface will produce runoff of the systemic agent in this product, thus, reducing effectiveness.

## **METHODS OF APPLICATION**

### **Hand Application**

This product may also be applied with hand-held equipment. Apply a coarse spray directed downward at the top of the stalk from 6 to 8 inches above the top leaves. Very little tank pressure is required. Do not use more than 20 pounds per square inch (psi).

### **Powered Spray Equipment**

**Broadcast Application:** When applying as a broadcast spray or straight boom application, use one nozzle directed over the center of the row and one nozzle directed over the center of the row- middle (TG-3, TG-5 full cone tips or equivalent) spraying one or more rows at a time, wetting the upper one-third or one-half of each plant. Maintain a coarse spray 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, apply in a minimum of 50 gallons of diluted emulsion 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, apply in a minimum of 50 gallons of diluted emulsion per acre of Tobacco. Apply the diluted product to Tobacco as a 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, use three nozzles per row (TG-3, TG-5 full cone tips or equivalent) spraying one or more rows at a time, wetting the upper one-third or one-half of each plant. Direct one TG-5 nozzle downward over the center of the row and TG-3 nozzles (9 inches on each side) directed at or slightly above the top of the stalk. Keep boom pressure at 20 to 25 psi and never exceed 30 psi. By using TG-3, TG-5 spray tips, spraying at 20 to 25 psi pressure and operating at a speed of 2.5 to 3 mph, apply a minimum of 50 gallons of diluting emulsion per acre of Tobacco. Apply the diluted product to Tobacco as a coarse spray from a height of 12 to 16 inches above the top of the stalk.

**Note:** Clean spray equipment with water after applications are completed. Do not contaminate water supplies when cleaning of equipment or disposal of wastes.

## STORAGE AND DISPOSAL

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

**STORAGE:** Store under lock and key in a ventilated room and secure from access by unauthorized persons and children. Store in a cool, dry area away from any heat or ignition source. Do not stack containers over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep containers tightly sealed when not in use. Keep away from any puncture source. Avoid storage near water supplies, food, feed and fertilizer to avoid contamination. Avoid contamination with oxidizing materials. Store in original containers only. If the contents are leaking or material is spilled, follow these steps:

1. Contain spill. Absorb with a material including sawdust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with soap and water to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Place a leaking container in plastic tub and transfer contents, as soon as possible, to an empty, original container.
6. Do not allow runoff to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below.

**PESTICIDE DISPOSAL:** To avoid wastes, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

### **CONTAINER HANDLING:**

**Nonrefillable Container (rigid material;  $\leq$  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; > 5 gallons up to < 250 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. 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 ( $\geq$  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% 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 believed adequate and reliable. Follow directions carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of the Manufacturer or Seller. All such risks shall be assumed by the user or Buyer.

To the extent consistent with applicable law, Manufacturer or Seller makes no other warranties, expressed or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond the statements made on this label. To the extent consistent with applicable law, in no case shall the Manufacturer or Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.



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