



Plant Growth Regulator for Controlling Suckers in Tobacco **ACTIVE INGREDIENTS:** 

1-Decanol (C <sub>10</sub> )	56.0%
Flumetralin	4.0%
OTHER INGREDIENTS:	
TOTAL:	100.0%
This product contains 4.20 pounds of 1 December (C.) and 0.3	nound of

This product contains 4.29 pounds of 1-Decanol (C<sub>10</sub>) and 0.3 pound of

# KEEP OUT OF REACH OF CHILDREN

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 Shake Well Before Using [Recirculate Contents Before Use]

EPA Reg. No. 19713-684 **Net Content: EPA Est. No. 19713-XX-XXX** Gals.(

#### **FIRST AID**

#### 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 SWALLOWED:

- Call a poison control center or doctor immediately for treatment
- 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 to an unconscious or convulsing person.

# 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 medical emergency.

#### NOTE TO PHYSICIAN:

Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

# PRECAUTIONARY STATEMENTS

### **Hazards to Humans and Domestic Animals**

Contains petroleum distillate.

WARNING: Causes substantial but temporary eye injury. Harmful if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eves or on clothing.

# 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.

(Continued)

### PRECAUTIONARY STATEMENTS (Cont.)

Applicators and other handlers must wear: Long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves such as barrier laminate or viton and protective eyewear such as goggles or face shield. Avoid breathing spray mist.

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 thoroughly 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. Do not apply directly to water or 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.

#### PRODUCT INFORMATION

TAK-PLUS is a plant growth regulator with a carefully balanced combination of active ingredients and wetting agents (surfactants) to be used for the control of sucker growth on Burley, Flue-cured and Dark tobacco. The concentrated product is diluted with water to form a creamy emulsion which is applied as a coarse spray. The emulsion is effective when it comes in direct contact with suckers; therefore, the material should be applied so that maximum contact is made with all Tobacco suckers. This product can be used alone or with Maleic Hydrazide (MH) such as Super Sucker-Stuff®, Sucker-Stuff® and Sucker-Stuff® 80EG in a dual treatment program.

# **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. (Continued)



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#### AGRICULTURAL USE REQUIREMENTS (Cont.)

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 24 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, such as plants, soil or water is: Coveralls over short-sleeved shirt and short pants, protective eyewear (goggles or face shield), chemical-resistant gloves made of any waterproof material (such as butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton), socks, chemical-resistant footwear and chemical-resistant headgear for overhead exposure.

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

#### SPRAY DRIFT MANAGEMENT

Non-target terrestrial plants can be adversely affected when exposed to this product. Do not apply this product if the wind direction does not favor on-target deposition. Must not be applied greater than 4 feet above crop or crop canopy.

#### MIXING INSTRUCTIONS

The diluted emulsion is most easily prepared by adding the required amount of this product to your spray tank one-half filled with water using mild agitation and then adding water for the required minimum solution. In order to obtain best results, it is important that the product always be added to water.

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.

#### **APPLICATION INSTRUCTIONS**

### Rate of Application

Mix 2 gallons of this product in sufficient water to total 50 to 60 gallons of spray solution per acre. Provide sufficient agitation during mixing and application to maintain a uniform mixture.

#### **Time of Application**

This product may be applied either before or after topping at the button to early flower stage. Apply this product when Tobacco plants are in the elongated button to early flower stage (10 to 25 percent open petal to bloom), before or after topping. If this product is applied after topping, apply within 24 hours of topping. At topping, remove all suckers from plants. This product is most effective if applied when humidity is low and leaf axils are fully exposed. Optimum time for application is generally between 10:00 A.M. and 6:00 P.M. on sunny days. Best results are obtained when plants are sprayed in the morning after the dew dries or in the afternoon when the plants have recovered from wilt. Some injury may occur to the tender leaves at the top of the plants from an application of this product under bright sunlight temperatures above 90°F. Injury may result if this product is applied to the underside of Tobacco leaves during high winds sufficient enough to turn leaves. In case of irregular plant growth, multiple applications will be required to achieve season long control. Do not apply during rain or to wet plants. If this material has been applied to Tobacco plants for over two hour prior to rain or irrigation, reapplication should not be necessary.

DO NOT apply this product more than two times per crop at a rate of 2 gallons per acre.

#### **METHODS OF APPLICATION**

#### **Hand Application**

Mix 2 gallons of this product in sufficient water to total 50 gallons of spray solution and apply as a coarse spray or drench to the top of the stalk using a handheld drop line or mix 5.1 fluid ounces of this product per gallon of water when using a backpack sprayer. Spray volume should be sufficient enough allowing stalk run down and contacting all leaf axils and sucker buds. Excessive spray volume beyond the point of runoff may result in carryover injury to rotational crops. Spray volume per plant will generally be 0.3 to 1 fluid ounce depending on plant height (or enough to ensure run down to the bottom of the plant). Do not exceed 50 gallons of spray volume per acre when using hand application methods.

#### **Powered Spray Equipment**

Mix 2 gallons of this product in sufficient water to total 50 to 60 gallons of spray solution per acre. 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.

**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). 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 50 to 60 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 50 to 60 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). 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 should 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 50 to 60 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.

#### **Use Precautions**

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

### **ADDITIONAL TREATMENT PROGRAMS**

### **Split Application of This Product**

Mix 2 gallons of this product in sufficient water to total 50 to 60 gallons of spray solution per acre. Follow with a second application 5 to 7 days later at the rate of up to 2 gallons of this product in sufficient water to total 50 to 60 gallons of spray solution 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 to Maleic Hydrazide Treatments: Mix 2 gallons of this product in sufficient water to total 50 to 60 gallons of spray solution per acre and apply either by precision hand application or application with powered spray equipment as described in the above sections of this label. Time the application of this product during the elongated button to early flower stage of growth. Approximately one week 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 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 gallons of this product in sufficient water to total at least 50 gallons minimum spray solution necessary to treat 1 acre 3 to 4 weeks after applying Maleic Hydrazide, depending on the development of suckers. Apply this product as a coarse spray, using powered spray equipment (3 nozzles per row) at least 7 days before the next leaf harvest. Spray volume should be sufficient to run down the stalk, contacting each leaf axil and sucker bud where suckers are present. Refer to the "Powered Spray Equipment" under the "Methods of Application" section for specific instructions.

#### Important

- 1. Remove all suckers before application of this product.
- 2. Follow all directions, precautions and restrictions on this label.

# Tank-Mix Application with Products Containing Maleic Hydrazide such as Super Sucker-Stuff, Sucker-Stuff or Sucker-Stuff 80EG

Mix 2 gallons of this product with one-half to full rate of Maleic Hydrazide in sufficient water to total 50 to 60 gallons of spray solution

and apply at the specified time for application of Maleic Hydrazide. Apply the mixture as a coarse spray at a volume of 50 to 60 gallons per acre with a boom pressure maintained at 25 to 30 psi by powered spray equipment as described in the above section of this label. For best results, follow the 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 label specified time for application of Maleic Hydrazide.

Always read all label directions, precautions and restrictions of products used in mixtures. Follow the most restrictive label.

#### **NOTES**

- Timing is most important. Apply at the timings described above. Remove all suckers prior to applications. Applications made prior to the elongated button stage of growth may result in chemical topping or distortion of immature leaves at time of application. Spraying too late may result in poor sucker control.
- 2. When a contact (fatty alcohol) is to be used, 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. Application and timing for spraying of this product is best at the elongated button to early flower stage.
- 3. When a contact (fatty alcohol) is not used, and a wide range of flowering exists, top and remove all suckers of early flowering plants. When 10 to 25 percent of remaining plants are in the elongated button to early flower stage, top and remove all suckers 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. In such case, a contact may not be needed.
- For proper sucker control, this product must contact all sucker buds and suckers one-half inch or less in length on plants to be sprayed.
- Control of suckers on plants that are lodged or leaning at time of application may be reduced.
- 6. Do not apply this product during windy periods. High winds will disrupt nozzle spray patterns on boom sprayers when leaves are turned causing improper contact and flow of the spray solution, often resulting in poor sucker control and possible injury.
- Application to wet plants or drought-stressed plants may result in poor sucker control.
- 8. In order to minimize the possibility of injury to plants, do not mix this product with other chemicals such as insecticides, fungicides or herbicides or apply this product to plants which have been recently treated with such chemicals.
- Carefully follow the specified use rates and spray volume. Spray field uniformly. Sufficient volume is needed for sufficient stalk rundown necessary to contact each leaf axil.
- 10. Rain occurring within 2 hours after spraying may reduce effectiveness.

# PLANT BACK INTERVAL

DO NOT replant treated areas to any crop other than Tobacco within 10 months after last application of this product.

# **USE 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. 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 of the soil in the Fall where excessive amounts of this product may have reached the soil is recommended.
- 2. When plant is in a stage 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 of application and avoid contacting leaves with the spray solution.

### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **STORAGE:** Storage should be under lock and key in a ventilated room and secure from access by unauthorized persons and children. Storage should be 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. (Continued)

#### STORAGE AND DISPOSAL (Cont.)

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:

- Contain spill. Absorb with a material such as 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 waste, 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; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. 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. Then offer for recycling, if available, or 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. 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. Then offer for recycling, if available, or 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 gallons or 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 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, 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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