Royal MH-30®

Growth Regulator - with Sorbatran®
Controls Tobacco Sucker Growth

Contents:
1 gallon

Active Ingredient: (% by weight)
maleic hydrazide, potassium salt (CAS No. 28382-15-2)
(1,2-dihydro-3,6-pyridazinedione, potassium salt)...............21.7%*

Inert Ingredients: .................................................................78.3%

Total: .................................................................................100.0%

*Contains 1.5 pound of maleic hydrazide per gallon.
*Contains 180 grams of maleic hydrazide per liter.

KEEP OUT OF REACH OF CHILDREN
CAUTION

First Aid and Precautionary Statements are on next page.

EPA REG. NO. 400-84
EPA EST. NO. 7874-NC-001
012/020915
SAP#504115 012 (0915)

Manufactured for:
MacDermid Agricultural Solutions, Inc.
245 Freight Street
Waterbury, CT 06702-1818
FIRST AID

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

EMERGENCY ASSISTANCE: Have the product container or label with you when calling a poison control center or doctor, or going for treatment:

24 HOUR EMERGENCY PHONE 1-866-928-0789

For PRODUCT USE INFORMATION: Call 1-866-761-9397

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

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 A on an EPA chemical-resistance category selection chart.

Applicators and Other Handlers Must Wear: long-sleeved shirt and long pants; chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride; 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.
• Remove personal protective equipment 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 by disposal of equipment washwaters.

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 draining 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 ground water, and areas overlying tile 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. Read all label directions carefully before use.

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, 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 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; chemical-resistant gloves made of any waterproof material; shoes plus socks.

DIRECTIONS FOR USE: TOBACCO

BENEFITS

To prevent sucker development on flue-cured, burley, dark, Maryland and cigar (Pennsylvania and Wisconsin) tobacco.

Applications of ROYAL MH-30® can influence the severity of bacterial wilt on tobacco during topping and harvesting. Disease suppression is dependent on timing of MH application.

PRODUCT INFORMATION

ROYAL MH-30® is a potassium salt formulation of maleic hydrazide used to prevent sucker development in tobacco. Because ROYAL MH-30 is absorbed and moves inside the tobacco plant, spraying the whole plant is not necessary. See APPLICATION NOTES for additional important information.
APPLICATION EQUIPMENT

Best results are obtained when ROYAL MH-30 is applied to the upper ⅓ to ½ of the plant. To obtain satisfactory control, it is very important to apply equal amounts of ROYAL MH-30 to each plant, at the correct time.

Flue-Cured Tobacco

Apply ROYAL MH-30 with powered spray equipment. Sprayers with 3 full cone nozzles per row, applying either a coarse spray (i.e., 20 to 30 psi) or a fine spray (40 to 50 psi), will give equivalent sucker control. **Do not use drop nozzles**, since such systems can deposit undesired spray on the underside of the leaves or on the lowest leaves, which are harvested first.

Burley, Maryland, Dark and Cigar (Pennsylvania and Wisconsin) Tobacco

Apply ROYAL MH-30 with motorized field sprayers (high-clearance or tractor-mounted) equipped with solid cone nozzles that deliver a coarse spray at 20 to 30 psi in a uniform spray pattern. For example, application may be made with a broadcast arrangement over the row on 20 to 24 inch boom spacings, or with a three solid cone nozzle arrangement directed over the row. With any sprayer setup, the application must provide good, uniform coverage of the crop. ROYAL MH-30 may also be applied with hand-held equipment, provided that a uniform spray pattern is delivered.

RATE AND TIMING OF APPLICATION

Apply the higher rate of ROYAL MH-30 when plants are very vigorous. Always remove any suckers present at topping time.

Flue-Cured Tobacco

Apply 1.5 to 2 gallons of ROYAL MH-30 in 40 to 50 gallons of water per acre as a coarse or fine spray. Application should be made 5 to 7 days after the last contact treatment, or when the uppermost harvestable leaves are a minimum of 8 inches long.

Suppression of Bacterial Wilt

Apply 1.0-1.5 gallons of ROYAL MH-30 per acre in 50 gallons volume per acre within 12 hours or less after first leaf removal (i.e., after 1st harvest) for reduction and suppression of bacterial wilt.

Burley and Maryland Tobacco

Top and sucker the plants when 10 to 25% of the plants in the field have one open flower. Remove all existing suckers and apply ROYAL MH-30 within 24 hours, at a rate of 1.5 to 2.0 gallons in 50 gallons of water per acre. Tip leaves to be harvested should be at least 8 inches long at time of topping, suckering and ROYAL MH-30 application.

Dark Tobacco

Apply 1.5 to 2 gallons of ROYAL MH-30 in 50 gallons of water per acre. Apply ROYAL MH-30 within 24 hours after topping. Topping should be done when 10 to 25% of the plants in the field have one open flower. Existing suckers should be removed at topping time.

Wisconsin Cigar Tobacco

Apply 1.5 to 2 gallons of ROYAL MH-30 in 50 gallons of water per acre. Apply ROYAL MH-30 within 24 hours after topping. Tobacco should be topped between the time when the first flowers open and not later than when 50% of the plants are in flower. Existing suckers should be removed at topping time.
Pennsylvania Cigar Tobacco
Apply 1.5 to 2 gallons of ROYAL MH-30 in 50 gallons of water per acre. Apply ROYAL MH-30 within 24 hours of topping. Topping should be done when 25 to 50% of the plants in the field have one open flower. Existing suckers should be removed at topping time.

APPLICATION NOTES: TOBACCO
1. Always follow dosage recommendations carefully and spray field uniformly. Too little ROYAL MH-30 may result in less than desired sucker control; too much may reduce quality of tips.
2. Use only one application of ROYAL MH-30 per year, unless rains occur within 6 hours after application. Should washoff occur within 6 hours, a single repeat application may be made to ensure effective sucker control.
3. To control tobacco suckers effectively, apply ROYAL MH-30 at the proper time. Spraying too early in the season may prevent normal development of top leaves; spraying too late will allow some sucker growth.
4. Do not tank mix ROYAL MH-30 with other fungicides and insecticides. If used apply separately.
5. Do not use on tobacco plants grown for seed production.
6. Do not spray tobacco in the middle of hot, dry days when leaves are severely wilted. For best results spray during the early morning, or all day on cloudy days, avoiding late afternoon or night applications.
7. Closely hand-suckered tobacco or tobacco treated with ROYAL MH-30 will not ripen as rapidly as poorly suckered tobacco. Also, under some conditions ROYAL MH-30 treated tips 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 ROYAL MH-30 by using time and color of the leaves as your only guide to ripeness. Use other characteristics indicative of ripeness such as:
   a. Fading of color from midrib.
   b. Change in apparent leaf texture.
8. If tobacco plants have been grown under drought conditions, absorption of ROYAL MH-30 may be slow, and results may not be as good as when plants have been grown under normal conditions.
9. Allow at least 7 days after application before harvest.
10. Even though ROYAL MH-30 is non-volatile, no drift should be permitted onto nearby crops.

ALWAYS SHAKE OR STIR WELL BEFORE USE.
STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container only. After partial use, replace lid and close tightly. Store in a secure place that is temperate, dry and out of direct sunlight. The active ingredient in ROYAL MH-30 will separate from the surfactant at temperatures above 134°F. If containers have been exposed to high temperatures, the contents can be remixed by lowering the temperature of the entire formulation below 134°F and applying agitation. ALWAYS SHAKE OR STIR WELL BEFORE USE.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Nonrefillable Container

Plastic Containers: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Then offer container for recycling, reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Triple rinse as follows: For containers with capacities equal to or less than 5 gallons: Empty the remaining contents into application or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ 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.

For containers with capacities greater than 5 gallons or 50 lbs.: Empty remaining contents into application equipment or a mix tank. Fill the container ¼ 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.

Recycling: Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact the Ag Container Recycling Council (ACRC) at 1-877-952-2272 (toll free) or www.acrecycle.org.

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, to the extent consistent with applicable law, 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 the buyer assumes the risk of any such use.

® MH-30 is a Registered Trademark of MacDermid Agricultural Solutions, Inc.
® SORBATRAN is a Registered Trademark of MacDermid Agricultural Solutions, Inc. for its proprietary spray adjuvant.
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Royal MH-30®
Growth Regulator- with Sorbatran®
Controls Tobacco Sucker Growth

Active Ingredient: (% by weight)
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(1,2-dihydro-3,6-pyridazinedione,
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Inert Ingredients: ...............................................................78.3%
Total: ........................................................................ 100.0%
*Contains 1.5 pound of maleic hydrazide per gallon.
*Contains 180 grams of maleic hydrazide per liter.

KEEP OUT OF REACH OF CHILDREN

CAUTION

Directions for Use are in the booklet attached to the container. IF BOOKLET IS MISSING, contact the company or an authorized dealer.

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©SORBATRAN is a Registered Trademark of MacDermid Agricultural Solutions, Inc.
for its proprietary spray adjuvant
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NET CONTENTS: 1 Gallon