



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

JUN 26 2008

Michael Dupre  
Registration Specialist  
Chemtura Corporation  
199 Benson Road  
Middlebury, Connecticut 06749-0001

Subject: Label Notification(s) for Pesticide Registration Notices 2007-4

Dear Mr. Dupre:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notices (PRN) 2007-4 dated June 4, 2008 for:

- |                                 |                                   |
|---------------------------------|-----------------------------------|
| <b>EPA Registration 400-97</b>  | <b>Maleic Hydrazide Technical</b> |
| <b>EPA Registration 400-165</b> | <b>Royal MH-30 SG</b>             |
| <b>EPA Registration 400-478</b> | <b>B-NINE WSG</b>                 |
| <b>EPA Registration 400-117</b> | <b>ALAR Technical</b>             |

The Registration Division (RD) has conducted a review of this request for applicability under PR Notices 2007-4 and finds that the label changes requested falls within the scope of PR Notices 2007-4. The label has been date-stamped "Notification" and will be placed in our records.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on nonrefillable containers. The code may appear either on the label (and can be added by non-notification/PR Notice 98-10) or durably marked on the container itself.

If you have any questions, please contact me directly at 703-305-6249 or Nicole Williams of my staff at 703-308-8893.

Sincerely,

Linda Arrington  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs

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Chemtura Corporation  
199 Benson Road  
Middlebury, Connecticut 06749

203-573-2000 tel  
www.chemtura.com

June 4, 2008

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
2777 S. Crystal Drive  
Room S-4900, One Potomac Yard, 4<sup>th</sup> Floor  
Arlington, Virginia 22202-4501

Attention: **Ms. Linda Arrington, Notifications  
Registration Division (7504P)**

Subject: **Amendment by the Notification Method, per PRN 2007-4:  
ROYAL MH-30<sup>®</sup>SG (EPA Reg. No. 400-165)**

Dear Ms. Arrington:

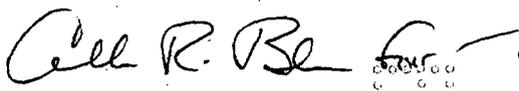
Chemtura Corporation (Company No. 400) herein submits an Application for Amendment of Registration by the Notification Method for **ROYAL MH-30<sup>®</sup>SG (EPA Reg. No. 400-165)**, an end-use product containing the active ingredient maleic hydrazide potassium salt (PC Code 51503). This is a solid (water soluble granule) dilutable product sold in nonrefillable non-rigid containers (bags or fiber drums with liners). This Notification is submitted in response to PR Notice 2007-4 (as amended April 23, 2008), and revises the Container Disposal statements with the exact wording set forth in the regulations.

We request that you send us a copy of the "Notification-Stamped" label, for those states that require such stamped label for their files.

If you have any questions about this notification, please contact either me or Allen Blem (Registration Specialist) at (203) 573-2487 or email [allen.blem@chemtura.com](mailto:allen.blem@chemtura.com).

Sincerely,

Chemtura Corporation

  
Michael Dupre  
Product Registration Mgr., N.A.

Attachments:  
Form 8570-1, with certification statement  
ROYAL MH-30SG label version 011, 1 copy, marked up

<b>EPA</b>	United States Environmental Protection Agency Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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**Application for Pesticide - Section I**

1. Company / Product Name <b>400-165</b>	2. EPA Product Manager <b>T. Kish</b>	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company / Product (Name) <b>ROYAL MH-30 SG</b>	PM# <b>22</b>	
5. Name and Address of Applicant (Include ZIP Code)  <b>Chemtura Corporation 199 Benson Road Middlebury, Connecticut 06749-0001</b>	6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3)(b)(I), my product is similar or identical in composition and labeling to:  EPA Reg No. <u>          <b>JUN 26 2008</b>          </u> Product Name _____	

check if this is a new address

**Section II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____.
<input type="checkbox"/> Resubmission in response to Agency letter dated _____.	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

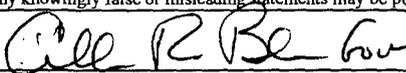
**Notification of label change per PR Notice 2007-4 (Container Disposal Statements).**

"This notification is consistent with the guidance in PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR §§ 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA, and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA."

**Section - III**

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No  <i>* Certification must be submitted</i>	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  If "Yes" Unit Packaging wgt      No. Per container	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  If "Yes" Packaging wgt      No. Per container	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input checked="" type="checkbox"/> Other (Specify) fiber drum with plastic liner
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container	4. Size(s) Retail Container <b>7.5 lb, 25 lb, 220 lb (100 kg)</b>	5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input checked="" type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product  <input checked="" type="checkbox"/> Lithograph      Other <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name <b>Allen Blem</b>	Title <b>Registration Specialist</b>	Telephone No. (Include Area Code) <b>(203) 573-2487</b> e-mail: <b>allen.blem@chemtura.com</b>
<b>Certification</b>		
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.		
2. Signature 	3. Title <b>Product Registration Manager, North America</b>	
4. Typed Name <b>Michael Dupre</b>	5. Date <b>June 4, 2008</b>	

5. Date Application Received  
**(Stamped)**

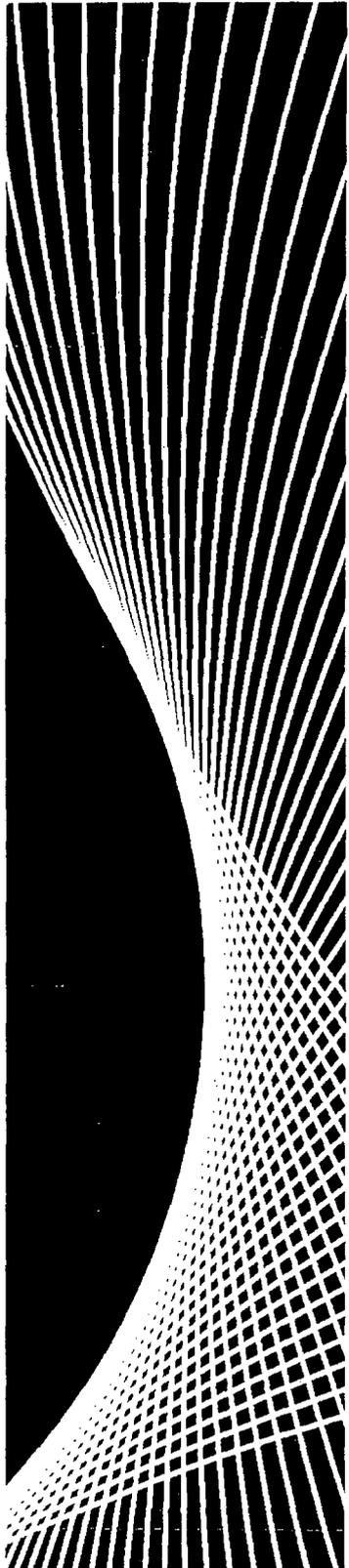
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# Royal MH-30<sup>®</sup> SG

NOTIFICATION

JUN 26 2008

Net Contents:



**Water Soluble Granule  
Growth Regulator - with Sorbatran<sup>®</sup>  
For Tobacco, Potatoes, Onions, Fallow Land,  
Grass and Ornamentals.**

Active Ingredient: (% by weight)  
maleic hydrazide, potassium salt (CAS No. 28382-15-2)  
(1,2-dihydro-3,6-pyridazinedione, potassium salt)..... 80.0%\*  
Inert Ingredients:..... 20.0%  
Total:..... 100.0%

\*Contains 60% maleic hydrazide by weight.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
<b>IF ON SKIN OR ON CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lens, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>EMERGENCY ASSISTANCE:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>EMERGENCY PHONE</b>	<b>800-292-5898</b>
<b>SAFETY DATA AND INFORMATION</b>	<b>866-430-2775</b>
<b>TRANSPORTATION EMERGENCY (CHEMTREC)</b>	<b>800-424-9300</b>

EPA REG. NO. 400-165  
EPA EST. NO.  
011

Manufactured for:  
Chemtura Corporation  
199 Benson Road  
Middlebury, CT 06749  
Product of UK



www.chemtura.com

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION**

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

**PERSONAL PROTECTIVE EQUIPMENT**

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.

**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.

**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

**MIXING INSTRUCTIONS**

ROYAL MH-30SG must be dissolved first if it is to be tank mixed with an insecticide or fungicide.

1. Be sure sprayer is clean and not contaminated with any material.
2. Fill tank <sup>3</sup>/<sub>4</sub> full with clean water, and start agitation.
3. Pour ROYAL MH-30SG slowly from bag into tank. Avoid dumping contents all at once.
4. Allow 2 to 3 minutes agitation for dissolving.
5. Add compatible tank mix insecticide or fungicide if needed and appropriate. See Application Notes for additional compatibility information.
6. Complete filling tank.

**DIRECTIONS FOR USE: TOBACCO**

**BENEFITS**

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

**GENERAL INFORMATION**

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

**APPLICATION EQUIPMENT**

Best results are obtained when ROYAL MH-30SG is applied to the upper <sup>1</sup>/<sub>3</sub> to <sup>1</sup>/<sub>2</sub> of the plant. To obtain satisfactory control, it is very important to apply equal amounts of ROYAL MH-30SG to each plant, at the correct time.

**Flue-Cured Tobacco**

Apply ROYAL MH-30SG 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-30SG 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.

ROYAL MH-30SG may also be applied with hand-held equipment, provided that a uniform spray pattern is delivered.

With any sprayer setup, the application must provide good, uniform coverage of the crop.

**RATE AND TIMING OF APPLICATION**

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

**Flue-Cured Tobacco**

Apply 4 to 5 pounds of ROYAL MH-30SG 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.

**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-30SG within 24 hours, at a rate of 4 to 5 pounds of product 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-30SG application.

**Dark Tobacco**

Apply 4 to 5 pounds of ROYAL MH-30SG in 50 gallons of water per acre. Apply ROYAL MH-30SG 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 4 to 5 pounds of ROYAL MH-30SG in 50 gallons of water per acre. Apply ROYAL MH-30SG 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 4 to 5 pounds of ROYAL MH-30SG in 50 gallons of water per acre. Apply ROYAL MH-30SG 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-30SG may result in less than desired sucker control; too much may reduce quality of tips.
2. Use only one application of ROYAL MH-30SG 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-30SG 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. Compatibility studies with ROYAL MH-30SG and foliage applied fungicides and insecticides have not been completed. Separate application is recommended.
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-30SG will not ripen as rapidly as poorly suckered tobacco. Also, under some conditions ROYAL MH-30SG 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-30SG by using time and color of the leaves as your only guide to ripeness. Use other characteristic 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-30SG 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-30SG is non-volatile, no drift should be permitted onto nearby crops.

11. **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 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: POTATOES**

**GENERAL INFORMATION**

ROYAL MH-30SG® is a potassium salt formulation of maleic hydrazide used on potatoes for control of tuber sprouting in storage and other benefits. To allow translocation of chemical down to the tubers, ROYAL MH-30SG should be applied after tubers are formed and while vines are still green and are free from insects, diseases or other disorders. See APPLICATION NOTES for additional important information.

**FOR USE ON POTATOES EAST OF THE ROCKY MOUNTAINS**

**BENEFITS**

**May Improve Grade**

ROYAL MH-30SG may improve the grade of potatoes, especially Russet Burbank variety, if the application is made prior to any secondary tuber formation.

**Sprout Control**

ROYAL MH-30SG will control sprouting of potatoes in storage. However, ROYAL MH-30SG will not make a poor-keeping potato such as Norgold or Norchip store as well as a good-keeping variety.

**Undersize Potatoes**

ROYAL MH-30SG will help reduce any additional "sets" of potatoes, thus decreasing the number of undersized potatoes in the field at harvest.

**Reduces Shrinkage**

ROYAL MH-30SG applications can reduce shrinkage in storage up to 15 percent.

**Reduction of Volunteer Potatoes**

ROYAL MH-30SG will reduce the number of volunteer potatoes the following spring because of its ability to control sprouting.

**TIMING OF APPLICATION**

Timing of application may occur as early as 2 to 3 weeks past full bloom, when the primary and secondary inflorescences have lost most of their flowers and a few third order inflorescences and buds are present. This occurs when a few lower leaves show a yellow color. APPLICATION PRIOR TO THIS TIME MAY RESULT IN PHYTOTOXICITY AND REDUCED TUBER SIZE. The following tuber sizes may also be used as a guide, provided the above conditions have been met:

### Russet Burbank and other Russet (elongated) types

The smallest tubers that will reach the harvestable size should be 1.5 to 2 inches in diameter and elongating at the time of spraying, except for Norgold, which must be at least 2 inches in diameter at the time of spraying.

### Other varieties (round types)

The smallest tubers that will reach the harvestable size should be 1.5 inch in diameter at the time of spraying, except for Norchip, which must be at least 2 inches in diameter at the time of spraying.

### RATE OF APPLICATION

#### Ground Application

Use 5 pounds of ROYAL MH-30SG per acre in a minimum of 30 gallons of water per acre.

#### Aerial Application

Use 5 pounds of ROYAL MH-30SG per acre in a sufficient quantity of water to gain complete and uniform coverage. Do not fly at heights of less than 8 to 12 feet. Maintaining this height will give more uniform coverage and aid in preventing excessive build up of chemical on the left side of the treated swath. These heights should be reduced if cross-wind velocities exceed 2 to 4 MPH.

### FOR USE ON POTATOES WEST OF THE ROCKY MOUNTAINS

### BENEFITS

#### May Improve Grade

ROYAL MH-30SG may improve the grade of potatoes if the application is made prior to any secondary tuber growth.

#### Sprout Control

ROYAL MH-30SG will control sprouting of potatoes in storage. However, ROYAL MH-30SG will not make a poor-keeping variety store as well as a good-keeping variety.

#### Reduces Shrinkage

ROYAL MH-30SG applications can reduce shrinkage in storage up to 15 percent.

#### Reduction of Volunteer Potatoes

ROYAL MH-30SG will reduce the number of volunteer potatoes the following spring because of its ability to control sprouting.

### TIMING OF APPLICATION

ROYAL MH-30SG should be applied when the smallest tubers that you want to harvest are 2 to 2.5 inches in diameter or about 2 to 2.5 ounces in weight. This usually occurs about 3 to 4 weeks after full bloom or 11 to 12 weeks after emergence on the Russet Burbank variety. The smallest tubers that are required to reach marketable size should be starting to elongate on Russet Burbank or similar varieties at the time of treatment. APPLICATION PRIOR TO THIS TIME MAY RESULT IN PHYTOTOXICITY AND REDUCED TUBER SIZE. If vines are to be desiccated, apply ROYAL MH-30SG at least 2 weeks prior to vine desiccation for good sprout control and storage benefits. DO NOT APPLY TO POTATO PLANTS THAT ARE UNDER STRESS.

### RATE OF APPLICATION

#### Ground Application

Use 5 pounds of ROYAL MH-30SG per acre in a minimum of 30 gallons of water per acre.

#### Aerial Application

Use 5 pounds of ROYAL MH-30SG per acre in a minimum of 10 gallons of water per acre. Do not fly at heights of less than 8 to 12 feet. Maintaining this height will give more uniform coverage and aid in preventing excessive build up of chemical on the left side of the treated swath. These heights should be reduced if cross-wind velocities exceed 2 to 4 MPH.

### DIRECTIONS FOR USE: ONIONS

### GENERAL INFORMATION

ROYAL MH-30SG® will control sprouting in storage of onions (dry bulb), shallots (dry bulb) and garlic. See APPLICATION NOTES for additional important information.

### TIMING OF APPLICATION

Green tops are essential for the absorption and effectiveness of this product.

ROYAL MH-30SG should be applied when the bulbs are fully mature, have at least 5 to 8 green leaves, and necks soft enough for the tops to fall if they have not already done so. The spray is often applied when 50 percent of the tops have fallen but all tops are still green. This condition usually occurs about 10 to 14 days before harvest time.

**NOTE:** Avoid spraying edible onions too early. If spraying is done earlier than two weeks before maturity, spongy bulbs may result.

### RATE OF APPLICATION

#### Ground Application

Use 3.33 pounds of ROYAL MH-30SG per acre in a minimum of 30 gallons of water per acre.

#### Aerial Application

Use 3.33 pounds of ROYAL MH-30SG per acre in a minimum of 10 gallons of water per acre. Do not fly at heights of less than 8 to 12 feet. Maintaining this height will give more uniform coverage and aid in preventing excessive build-up of chemical on the left side of the treated swath. These heights should be reduced if cross-wind velocities exceed 2 to 4 MPH.

### ONION VARIETIES

Use of ROYAL MH-30SG should be combined with selection of a good-keeping variety. Do not apply to onion varieties with poor-keeping quality. ROYAL MH-30SG will not make a poor-keeping variety store as well as a good-keeping variety.

### SPRAY ADJUVANTS FOR ONIONS

West of the Rocky Mountains: Use a commercial non-ionic surfactant similar to X-77® or R-11® at the rate of 1 quart per 100 gallons of spray solution in arid sections of the U.S. Such products may help provide better coverage and aid in translocation of ROYAL MH-30SG. The commercial surfactant must be cleared for application to growing crops.

East of the Rocky Mountains: Use of surfactants is not normally recommended.

®X-77 is a registered trademark of Loveland Industries, Inc.

®R-11 is a registered trademark of Wilbur-Ellis Company.

### APPLICATION NOTES: POTATOES AND ONIONS

1. Always follow dosage recommendations carefully and spray field uniformly. Uniform and complete coverage is essential for satisfactory results.
2. Uneven application may result in bud end cracking and/or "elephant hide" on potato tubers.
3. To obtain desired results, plants should not be stressed from either too little or excessive water before or after application.
4. Do not use on potato plants grown for seed production.
5. Use only one application of ROYAL MH-30SG per year.
6. Spray potatoes or onions at least 24 hours before rain or applying overhead irrigation. Rain or overhead irrigation occurring within 24 hours after application may reduce effectiveness.
7. At least a 2-week interval should be allowed between ROYAL MH-30SG application to potatoes and the use of a vine desiccant.
8. Although ROYAL MH-30SG is non-volatile, no drift should be permitted onto nearby crops. Particular care should be taken to prevent drift when aerial applications are being made.

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- 9. 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 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.
- 10. TEMPERATURE: ROYAL MH-30SG should be applied at temperatures below 85°F or at temperatures below 80°F if the temperature is expected to exceed 85°F later that day. ROYAL MH-30SG is water soluble and under high temperature and low humidity conditions will crystallize on the leaf surface and will not be readily absorbed into the plant.
- 11. SPRAY ADJUVANTS: For potatoes, do not add additional wetting agents or commercial spray adjuvants to ROYAL MH-30SG spray solutions. For onions, see Directions for Use.
- 12. COMPATIBILITY: Although ROYAL MH-30SG is compatible with most commonly used foliar insecticides and fungicides, separate application is recommended.
- 13. Occasional injury to the terminal growth of potato foliage has been observed following the application of ROYAL MH-30SG. However, trials and usage indicate that this does not adversely affect the yield or the quality of the potato tubers at harvest; provided that the product has been applied according to label directions.

**DIRECTIONS FOR USE: TURF**

BENEFITS: TO CONTROL THE GROWTH OF PERENNIAL GRASSES ON COMMERCIAL TURF LOCATIONS

**GENERAL INFORMATION**

ROYAL MH-30SG® is used mostly as a substitute for mechanical mowing on commercial turf locations such as hard-to-mow areas along highways, airports property, military installations, Federal, state and municipal properties, industrial areas, golf course roughs and similar areas. It can be used for grass inhibition on all turf areas except on fine lawns (where esthetic appearance is more important than reducing a maintenance chore) and on those areas under heavy foot traffic (such as golf course fairways and greens, except for *Poa annua* control).

Perennial grasses effectively retarded by ROYAL MH-30SG include bluegrasses, fescues, bromegrass, orchardgrass, quackgrass, perennial rye, ryegrass and bahiagrass (not for use on bahiagrass in California). Bentgrass can be inhibited, but may be discolored. ROYAL MH-30SG will injure St. Augustine grass and should not be used on that species.

The growth regulating action of ROYAL MH-30SG greatly reduces or prevents seed stalk and seed head formation and slows leaf growth. If the application is timed properly, no significant growth will occur for several weeks after the treatment. As the effect gradually wears off, the turf may grow to 6 to 12 inches in height by the end of the growing season.

See APPLICATION NOTES for additional important information.

**APPLICATION EQUIPMENT**

Applications may be made with standard booms using flat fan type nozzle tips in the 80° series (i.e. 8003, 8004) placed on 10 inch centers and turned 45° out from the boom line. This spacing allows 50% overlap when the boom is 18 to 20 inches above the grass and a uniform spray pattern. Applications may also be made with off center nozzle systems. Because accurate calibration is required, use of low speed speedometers is recommended. Spraying should not be done on excessively windy days.

**TIMING OF APPLICATION**

ONE APPLICATION PER YEAR EITHER SPRING OR AUTUMN SHOULD BE USED. At either time, the area to be treated must be green and actively growing. Turf to be treated must be free of leaf cover or other debris that would prevent direct contact of the spray with the grass.

**SPRING:** For the best growth control, apply spring treatments when grass is 2 to 3 inches tall. This timing usually occurs just before and during early dandelion or forsythia bloom. If this timing period is missed and the grass reaches a height of 6 inches or more, spray and then mow 5 to 7 days later. UNDER NO CONDITIONS SHOULD GRASS BE CUT SHORTER THAN 3 TO 4 INCHES. Because the grass growth rate is greatly reduced by a ROYAL MH-30SG treatment, a short cut may produce a scalped or light brown effect, especially if dry weather follows.

**AUTUMN:** ROYAL MH-30SG may instead be applied late in the growing season to reduce grass growth the following spring. Treatment should be made while grass is still green and before it becomes dormant (usually during October). An additional benefit of autumn treatment is control of wild onion, garlic and biennial weeds such as dandelion and plantain. Because grass growth is inhibited the following spring, the area will green up about two weeks later than untreated turf.

**RATE OF APPLICATION**

Apply 7 to 10 pounds of ROYAL MH-30SG in 30 to 50 gallons of water per acre. Use the higher rate for autumn applications and when a longer period of retardation is desired.

On grass where broadleaf growth is a problem, ROYAL MH 30SG may be used in a tank-mix combination with low volatile ester or amine formulations of 2,4-D. One pound of 2,4-D active ingredient per acre should be used with ROYAL MH-30SG in most spring applications. Carefully follow dosage and precautionary information of the 2,4-D label. If weeds have not emerged at time of ROYAL MH-30SG application a separate, later spray of 2,4-D is recommended to control these weeds.

**USES ON SPECIAL TURF GRASS AREAS**

**A. Golf Course Fairways:** ROYAL MH 30SG can be used to reduce *Poa annua* (annual bluegrass) in golf course fairways. Recommended procedure is to first-mow area twice in normal sequence (usually 5 to 6 days apart). When third mowing is needed **and before first *Poa annua* seed heads appear**, apply 1.25 pounds of ROYAL MH-30SG in 30 to 40 gallons of water per acre. Do not use over 40 gallons per acre as effectiveness may be reduced. The effect of this treatment should be evident in 8 to 10 days, showing up as a reduction in *Poa annua* reseeding with little retardation of desirable grass growth.

**B. Overseeding Ryegrass In Bermudagrass:** Excessive bermudagrass growth on golf greens and fairways is frequently a problem in the fall after verticutting, fertilization, overseeding and top dressing. Apply ROYAL MH-30SG in late September or early October to inhibit the growth of bermudagrass and enable ryegrass or other grasses to produce a good stand. Use 3.75 pounds of ROYAL MH-30SG in 50 gallons of water per acre. ROYAL MH-30SG should be applied with a calibrated boom. The bermudagrass must be in good condition. Overseed no sooner than 48 hours after ROYAL MH-30SG application.

**C. Home Lawns:** ROYAL MH-30SG IS NOT RECOMMENDED AS AN OVERALL TREATMENT FOR PRIME LAWNS OR OTHER FINE TURF AREAS. However, ROYAL MH-30SG may be used as a band or edge treatment of lawn areas where it is difficult to trim mechanically. Examples: along walls, around trees, rocks, etc.

**SPECIAL NOTE:** Because it is difficult to apply ROYAL MH-30SG at a uniform rate and dosage to small areas, some color modification may occur. Any slightly abnormal color of the treated area is temporary. At times, the treated grass actually is a greener color than untreated turf.

Do not apply ROYAL MH-30SG during the summer or at other times when permanent grasses are dormant (example: under drought conditions).

**DIRECTIONS FOR USE: ORNAMENTAL SHRUBS AND TREES**

BENEFITS: TO RETARD THE GROWTH OF CERTAIN ORNAMENTALS

**GENERAL INFORMATION**

ROYAL MH-30SG® can be used to suppress excessive vegetative growth and reduce the need to mechanically prune or shear many ornamental shrubs and trees. See APPLICATION NOTES for additional important information.

The following **trees** can be treated with ROYAL MH-30SG:

Acacia, Black	Dogwood	Mulberry
Alder	Elderberry	Oak
Ash	Elm	Pine, Monterey
Bay (California Laurel)	Eucalyptus	Plane (Sycamore)
Birch	Fir, Douglas	Poplar
Box-Elder	Linden	Redbud, Western
Brevillea Silk Oak	Liquid Amber (Sweet Gum)	Redwood
Buckeye, California	Madrone	Walnut
Catalupa	Manzanita	Wax-Myrtle, California
Cypress, Monterey	Maple	Willow, Black

ROYAL MH-30SG will effectively retard excessive vegetative growth on the following **shrubs**:

Cissus	Myrtus	Pyracantha
Eugenia	Pittosporum	Viburnum
Forsythia	Privet	Xylosoma
Honeysuckle		

ROYAL MH-30SG may be used to inhibit the growth of **Hahn** and **Algerian Ivy**. A special use for ROYAL MH-30SG is for weed control in **Ice Plant**. It may be used for both emerged broadleaf weed and annual grass control without injury to the herbaceous growth.

**TIMING OF APPLICATION**

Best results are obtained when spray is applied to green, vigorous new growth. On trees, new leaves should be fully expanded when treatment is made. ROYAL MH-30SG should be used only once a year: either in spring, after new growth has started; or in early summer, after pruning when new regrowth is about 2 to 4 inches long.

The best procedure is to apply to plants that have been previously pruned into the desired shape. Some regrowth should be allowed before treatment to hide fresh cut ends of limbs or stems to prevent a barren appearance of the treated plant. ROYAL MH-30SG should only be used on vigorous, healthy plants.

All areas to be inhibited should be sprayed to drip-point covering all surfaces of leaves and stems. See specific application volumes below. If only one section of a tree is to be controlled, spray just that section and normal growth will continue in the unsprayed sections. Do not spray where wind velocity exceeds 15 mph. Drift should not go on nearby crops.

**RATE OF APPLICATION**

ROYAL MH-30SG is recommended at a rate of 4 to 5 pounds per 100 gallons of water for all tree, shrub, ivy and ice plant uses. Use the higher rate on plants that are more vigorous.

The rates of ROYAL MH-30SG are based on the use of a standard 200 gallons per acre of diluted spray for mature trees, 100 gallons per acre for full-size shrubs, and 50 gallons per acre for ivy and ice plant.

**DIRECTIONS FOR USE: FALLOW LAND**

(Not Approved for Use In Arizona or California)

**A. TO CONTROL SILVERLEAF NIGHTSHADE****GENERAL INFORMATION**

Silverleaf Nightshade (*Solanum elaeagnifolium*) is a troublesome perennial weed that overwinters and may compete with subsequent crops and cultivations. ROYAL MH-30SG® may be applied to Silverleaf Nightshade in the fall, after the season's crop is harvested. The effect on the weed obtained is no subsequent growth and eventual kill the following spring. See APPLICATION NOTES for additional important information.

**TIMING OF APPLICATION**

Apply to Silverleaf Nightshade during periods of active growth but after crop harvest. It may be applied to Silverleaf Nightshade anytime during bloom.

**RATE OF APPLICATION**

Apply 15 pounds of ROYAL MH-30SG in 10 to 20 gallons of water per acre.

**B. TO CONTROL RED RICE****GENERAL INFORMATION**

Red Rice is a troublesome annual weed in the management of fallow land, because it competes with subsequent crop production, particularly rice. Foliar application of ROYAL MH-30SG reduces Red Rice seedhead and seed production, thereby reducing the potential for infestation of subsequent crops.

**TIMING OF APPLICATION**

Apply to Red Rice after panicle differentiation, up until the boot stage.

**RATE OF APPLICATION**

For suppression of Red Rice seed and seedheads, apply 2.5 pounds of ROYAL MH-30SG in 10 to 20 gallons of water per acre.

NOTE: DO NOT GRAZE TREATED AREAS OR FEED TREATED FORAGE TO LIVESTOCK. DO NOT PLANT FOOD OR FEED CROPS WITHIN 6 MONTHS AFTER APPLICATION.

**APPLICATION NOTES:****TURF, ORNAMENTALS AND FALLOW LAND**

1. Always follow dosage recommendations carefully and spray area uniformly. Uniform and complete coverage is essential for satisfactory results.
2. Use only one application of ROYAL MH-30SG per year.
3. All turf areas to be treated should contain well-established perennial grasses at least three years old.
4. Apply only to green vigorous plants.
5. To obtain desired results, plants should not be stressed from either too little or excessive water before or after application.
6. Do not apply this product through any type of irrigation system.
7. Time treatment to be at least 12 hours before rain or overhead irrigation. Rain or overhead irrigation occurring within 12 hours after application may result in incomplete absorption of this product and may reduce effectiveness.
8. Although ROYAL MH-30SG is non-volatile, no drift should be permitted onto nearby crops.

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- 9. 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 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.
- 10. SPRAY ADJUVANTS: Do not add additional wetting agents or commercial spray adjuvants to ROYAL MH-30SG spray solutions.
- 11. DO NOT PASTURE LIVESTOCK IN, OR CUT HAY FROM, TREATED AREAS.

**STORAGE AND DISPOSAL**

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

**STORAGE:** Store in the original container only. After partial use, close container tightly. Store in a secure place that is temperate and dry.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes can not 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.

**EQUIPMENT CLEANING:** ROYAL MH-30SG is not corrosive to spray equipment. Following applications, all spray equipment should be thoroughly rinsed with water. Do not contaminate water by disposal of equipment washwaters.

**CONTAINER DISPOSAL:** ~~Nonrefillable container. Do not refill or reuse. Offer for recycling if available.~~

**Bags or fiber cartons with liners:** Completely empty liner or bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner or bag in a sanitary landfill, or by incineration if permitted by State and local authorities. Dispose of carton in the same manner.

**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, **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 conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.**

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