Willard F. Cummings
Uniroyal Chemical Co., Inc.
74 Amity Rd.
Bethany, CT 06524-3402

Dear Mr. Cummings:

Subject: Revised Labeling

Royal MH-30 (Petators and onions)
EPA Registration No. 400-84
Royal MH-30 SG (Petators, onions, etc.)
EPA Registration No. 400-165
Royal MH-30 XTRA (Petators, onions)
EPA Registration No. 400-452

FM God 4000 - law

Your Submissions Dated October 3, 1994

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you:

- 1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - In your directions for use of a non-ionic surfactant specify that the surfactant must be cleared for application to growing crops.
- 2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

/5 *|* 

Cynthia Giles-Parker Product Manager (22) Fungicide Herbicide Branch Registration Division (7505C)

Enclosure

# WATER SOLUBLE GRANULE GROWTH RETARDANT FOR POTATOES, ONIONS, FALLOW LAND, GRASS AND ORNAMENTALS

Net contents:

COMPOSITION

Active Ingredient: (% by weight)

Potassium salt of 1,2-dihydro-3,6-pyridazinedione 80.0%\*
Inert Ingredients: 20.0%

ACCEPTED
with COMMENTS
In EPA Letter Dated:

# KEEP OUT OF REACH OF CHILDREN CAUTION

# STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush eyes with plenty of water. Call a physician it irritation persists.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove to fresh air.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye injury. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and Other Handlers Must Wear: Long-sleeved shirt and long pants; waterproof gloves; 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.

Uniroyal Chemical Company, Inc., Middlebury, CT 06749

EPA Reg. No. 400-165

EPA Est. No.

005WPS

### **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 apricultural workers on farms, forests, nurseries, and preenhouses, 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 (FFF) 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; waterproof gloves; shoes plus socks

contents all at once.

- 4. Allow 2 to 3 minutes agitation for dissolving.
- 5. Add compatible tank mix insecticide or fungicide if needed. See Application Notes for additional information.
- 6. Complete filling tank.

# 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 below for additional important information.

# FOR USE ON POTATOES EAST OF THE ROCKY MOUNTAINS BENEFITS

### **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 into a good-keeping potato.

# **Reduction of Volunteer Potatoes**

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

# 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.

### **Undersize Potatoes**

ROYALMH-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.

### 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 are required to reach a minimum size of 4 to 6 oz. 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 are required to reach maximum 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

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

#### Aerial

Use 5 pounds of ROYAL MH-30SG per acre in a sufficient quantity of water to gain complete and uniform coverage. Do not fly atheights 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.

keeping potato.

#### Reduction of Volunteer Potatoes

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

# Reduces Shrinkage

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

#### TIMING OF APPLICATION

ROYAL MH-30SG should be applied 3 to 4 weeks prior to normal harvest but at least 2 weeks prior to potato vine desiccation for good sprout control and for storage benefits. APPLICATION PRIOR TO THIS TIME MAY RESULT IN PHYTOTOXICITY AND REDUCED TUBER SIZE. DO NOT USE ON POTATOES THAT HAVE BEEN STRESSED AT ANY TIME DURING THE GROWING SEASON.

# **RATE OF APPLICATION**

# Ground

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

### **Aerial**

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.

# ONIONS GENERAL INFORMATION

ROYAL MH-30SG will control sprouting of onions in storage. See APPLICATION NOTES below for additional important information.

#### TIMING OF APPLICATION

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. Green tops are essential for the absorption and effectiveness of ROYAL MH-30SG.

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

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

### **Aerial**

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 closs-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 poor-keeping varieties equal to good-keeping varieties.

# SPRAY ADJUVANTS FOR ONIONS

West of the Rocky Mountains: Use a non-ionic surfactant similar to X-77° of 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.

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**

- Always follow dosage recommendations carefully and spray field uniformly. Uniform and complete coverage is essential for satisfactory results.
- 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.
- 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.
- At least a 2-week interval should be allowed between a ROYAL MH-30SG application to potatoes and the use of a vine desiccant.
- Even though 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.
- 8. TEMPERATURE: RGYAL 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.
- SPRAY ADJUVANTS: For potatoes, do not add any additional wetting agents or commercial spray adjuvants to ROYAL MH-30SG spray solutions. For onions, see Directions for Use.
- COMPATIBILITY: ROYAL MH-30SG is compatible with most commonly used insecticides and fungicides. However, separate application is recommended.
- 11. 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, if the chemical is applied according to label recommendations.

# 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 various 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 are blue-grasses, fescues, bromegrass, orchardgrass, quackgrass, perennial rye, ryegrass and bahiagrass (not for use on bahiagrass in California). Bentgrass can be inhibited, but often shows discoloration effects. ROYAL MH-30SG will injure St. Augustinegrass and should not be used on this species

The growth regulant 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 below for additional important information.

## **APPLICATION TIMING**

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: Apply spring treatments when grass is 2 to 3 inches tall for the best growth control. 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. 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 also be applied late in the growing season to reduce grass growth the following spring. Treatment should be made while grass is still green but before it becomes dormant (usually during October). An additional benefit of autumn treatment is control of wild onion, garlic and biennial type weeds such as dandelion and plantain. Since grass growth is inhibited the following spring, the area will green up about two weeks later than untreated rurf.

# RATE OF APPLICATION

Apply 7 to 10 pounds of ROYAL MH-30SG in 30 to 50 gailons of water. 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 per acre should be used with ROYAL MH-30SG in most spring applications. Carefully follow dosage and precautionary information of the 2,4-Dlabel. 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.

# **APPLICATION EQUIPMENT**

Applications may be made with standard booms using flat fan type nozzle tips in the 80° series, i.e. 8003, 8004. These tips should be 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. Accurate calibration is required using low speed speedometers. Spraying should not be done on excessively windy days.

# **SPECIAL GRASS AREAS**

- A. GOLF COURSE FAIRWAYS: ROYAL MH 30SG may 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 par 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 reseading with little retardation of desirable grass growth.
- B. OVERSEEDING RYEGRASS IN BERMUDAGRASS: Excessive growth of bermudagrass on golf greens and fairways is often 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 spraying

C. HOME LAWNS: ROYAL MH-30SG IS NOT RECOMMENDED AS AN OVERALL TREATMENT FOR PRIME LAWNS OR OTHER FINE TURE AREAS: ROYAL MH-30SG can be used as a band or edge treatment of lawns where it is difficult to trim mechanically. Examples are: along walls, around trees, rocks, etc.

SPECIAL NOTE: Because of the difficulties in applying 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 a temporary effect At times, the treated grass may be 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).

# SHRUBS AND DECIDUOUS TREES BENEFITS: TO RETARD THE GROWTH OF CERTAIN ORNAMENTALS GENERAL INFORMATION

ROYALMH-30SG may be used to suppress excessive vegetative growth and reduce the need to mechanically prune or shear certain ornamental species. See APPLICATION NOTES below for additional important information.

# **TIMING OF APPLICATION**

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.

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 Qak	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	Vibumum
Forsythia	Privet	Xylosoma
Honeysuckle		•

ROYAL MH-30SG may he used to inhibit the growth of **Hahn** and **Algerian lvy**. 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.

All areas to be inhibited should be sprayed to drip-point covering all surfaces of leaves and stems. 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.'

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 - in spring, after new growth has started; or in early summer -usually after pruning when new regrowth is about 2 to 4 inches in length.

# **RATE OF APPLICATION**

ROYAL MH-30SG is recommended for all uses at a rate of 4 to 5 pounds per 100 gallons of water. Use the higher rate on shrubs and trees that are vigorous

# FALLOW LAND TO CONTROL SILVERLEAF NIGHTSHADE

(DO NOT USE IN ARIZONA AND CALIFORNIA)

**BENEFITS**: Silverleaf Nightshade 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.

### RATE OF APPLICATION

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

# **APPLICATION TIMING**

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

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

- Always follow dosage recommendations carefully and spray area uniformly. Uniform and complete coverage is essential for satisfactory results.
- 2. All turf areas to be treated should contain well-established perennial grasses at least three years old.
- 3. Apply only to green vigorous plants.
- 4. To obtain desired results, plants should not be stressed from either too little or excessive water before or after application.
- 5. Do not apply this product through any type of irrigation system.
- 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.
- 7. Even though ROYAL MH-30SG is non-volatile, no drift should be permitted onto nearby crops.
- 8. SPRAY ADJUVANTS: Do not add any extra wetting agents or commercial spray adjuvants to ROYAL MH-30SG spray solutions.
- 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 Hazardoris what e representative at the nearest EPA Regional Office for guidance.

equipment. Following applications, all spray equipment should be thoroughly rinsed with water. Do not contiminate water by disposal of equipment washwaters.

# CONTAINER DISPOSAL:

Fiber carton with finers or bags: Completely empty liner or bag by shaking and tapping sides and bottom to loosen clinding 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.

7.

important notice—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the labci 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 abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

- ® MH-30 is a Registered Trademark of Uniroyal Chemical Company, Inc.
- © Copyright 1995, Uniroyal Chemical Company. Inc.

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# WATER SOLUBLE GRANULE GROWTH RETARDANT FOR POTATOES AND ONIONS

Net contents:

### COMPOSITION

ACCEPTED
with COMMENTS
EPA Letter Dated:

Active Ingredient: (% by weight)	
Potassium salt of 1,2-dihydro-3,6-pyridazinedione	80.0%
Inert Ingredients:	
Total:	

# KEEP OUT OF REACH OF CHILDREN CAUTION

# STATEMENT OF PRACTICAL TREATMENT

\*Contains 60% of maleic hydrazide by weight.

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove to fresh air.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Causes moderate eye injury. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and Other Handlers Must Wear: Long-sleeved shirt and long pants; waterproof gloves; 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.

Uniroyal Chemical Company, Inc., Middlebury, CT 06749

EPA Reg. No. 400-165

EPA Est No.

005WPS

# **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 apricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontainination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPR) 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; waterproof gloves; shoes plus socks



APPLICATION NOTES for additional information.

6. Complete filling tank.

# 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 below for additional important information.

# FOR USE ON POTATOES EAST OF THE ROCKY MOUNTAINS BENEFITS

**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 into a good-keeping potato.

# **Reduction of Volunteer Potatoes**

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

# 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.

### **Undersize Potatoes**

ROYALMH-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.

### 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 are required to reach a minimum size of 4 to 6 oz. 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 are required to reach maximum 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

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

# Aerial

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 offess 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.

following spring because of its ability to control sprouting.

Reduces Shrinkage

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

### TIMING OF APPLICATION

ROYAL MH-30SG should be applied 3 to 4 weeks prior to normal harvest but at least 2 weeks prior to potato vine desiccation for good sprout control and for storage benefits. APPLICATION PRIOR TO THIS TIME MAY RESULT IN PHYTOTOXICITY AND REDUCED TUBER SIZE. DO NOT USE ON POTATOES THAT HAVE BEEN STRESSED AT ANY TIME DURING THE GROWING SEASON.

### **RATE OF APPLICATION**

#### Ground

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

#### **Aerial**

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.

# ONIONS GENERAL INFORMATION

ROYAL MH-30SG will control sprouting of onions in storage. See APPLICATION NOTES below for additional important information.

### **TIMING OF APPLICATION**

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. Green tops are essential for the absorption and effectiveness of ROYAL MH-30SG.

**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

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

# **Aerial**

Use 3.33 pounds of ROYAL MH-3056 per acre in a minimum of 10 gallons of water per acre. Do not fly at heights of let's 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 it 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 peor-keeping quality, ROYAL MH-30SG will not make poor-keeping varieties equal to good-keeping varieties.

SPRAY ADJUVANTS FOR ONIONS

West of the Rocky Mountains: Use a 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.

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**

- Always follow dosage recommendations carefully and spray field uniformly. Uniform and complete coverage is essential for satisfactory results.
- 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. 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.
- At least a 2-week interval should be allowed between a ROYAL MH-30SG application to potatoes and the use of a vine desiccant.
- Even though 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.
- 8. 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.
- 9. SPRAY ADJUVANTS: For potatoes, do not add any additional wetting agents or commercial spray adjuvants to ROYAL MH-30SG spray solutions. For onions, see Directions for Use.
- 10. COMPATIBILITY: ROYAL MH-30SG is compatible with most commonly used insecticides and fungicides. However, separate application is recommended.
- 11. 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, if the chemical is applied as cording to tabel recommendations.

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 nosate 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.

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:**

Fiber carton with liners or bags: 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 abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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