

70905-3

2/17/2011

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

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

FEB 17 2011

Dr. Matthew Brooks  
Sulphur Mills c/o Ag Chem Consulting  
12208 Quinque Lane  
Clifton, VA 20124

Subject: Alternate Brand Name

Dear Dr. Brooks:

The Agency is in receipt of your Application(s) for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated January 1, 2011 for:

**EPA Reg. No. 70905-3**

**Pronto 70 WG Insecticide (Alternate Name: "HotShot 70 WG Insecticide"**

Registration Division (RD) has conducted a review of this request for applicability under PRN 98-10 and finds that the label change(s) requested falls within the scope of PR Notice 98-10. The labels have been date-stamped "Notification" and will be placed in our records.

If you have any questions, at 703 305-5409 or electronically at [daniel.dani@epa.gov](mailto:daniel.dani@epa.gov)

Sincerely,

A handwritten signature in black ink, appearing to be "DS1".

Dani Daniel  
Registration Division (7505P)  
Insecticide/Rodenticide Branch

NOTIFICATION 2/37



United States  
**Environmental Protection Agency**  
 Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number  
 17 2011

**Application for Pesticide - Section I**

1. Company/Product Number Sulphur Mills/ 70905-3	2. EPA Product Manager Venus Eagle	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Sulphur Mills/Pronto 70 WG Insecticide	PM# 01	
5. Name and Address of Applicant (Include ZIP Code) Sulphur Mills c/o Ag Chem Consulting 12208 Quinque Lane Clifton, VA 20124 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

**Section - II**

Amendment - Explain below.  Final printed labels in response to Agency letter dated \_\_\_\_\_

Resubmission in response to Agency letter dated \_\_\_\_\_  "Me Too" Application.

Notification - Explain below.  Other - Explain below.

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

Notification of Additional Brand Name - HotShot 70 WG Insecticide  
 This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40CFR 152.46, and 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 this notification is not consistent with the terms of PR Notice 98-10 and 40CFR152.46, 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	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container

3. Location of Net Contents Information  
 Label  Container

4. Size(s) Retail Container  
5, 10, and 30 lb bags

5. Location of Label Directions  
 On bag

6. Manner in Which Label is Affixed to Product  
 Lithograph Paper glued Stenciled  Other \_\_\_\_\_

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Dr. Matthew Brooks	Title Regulatory Consultant	Telephone No. (Include Area Code) 703-266-0128
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**Certification**  
 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 statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature

3. Title  
Regulatory Consultant

4. Typed Name  
Dr. Matthew Brooks

5. Date  
01-1-11

6. Date Application Received (Stamped)



**Ag-Chem Consulting**  
Pesticide Science and Registration  
12208 Quinque Lane, Clifton VA 20124  
(703) 266-0128 [mwbrooks@ag-chem.com](mailto:mwbrooks@ag-chem.com)  
(703) 266-4377 Fax

January 11, 2011

Venus Eagle  
Product Manager 01  
Insecticide-Rodenticide Branch  
Registration Division (7504P)  
One Potomac Yard (South Building)  
2777 S. Crystal Drive  
Arlington, VA 22202

**Subject: HotShot 70 WG Insecticide  
Notification of Alternate Brand Name for Pronto 70 WG Insecticide  
EPA Reg. No. 70905-3**

Dear Ms. Eagle,

Ag-Chem Consulting, on behalf of Sulphur Mills, hereby submits the following Notification of Alternate Brand Name for the above product.

Should you have any questions or require additional information, please do not hesitate to contact me at 703-266-0128.

Very Sincerely,

Dr. Matthew Brooks  
Director, Ag-Chem Consulting  
An Authorized Representative for Sulphur Mills

cc: Venus Eagle  
cc: Product Manager 01  
cc: Insecticide-Rodenticide Branch  
cc: Registration Division (7504P)  
cc: One Potomac Yard (South Building)  
cc: 2777 S. Crystal Drive  
cc: Arlington, VA 22202  
cc: Ag-Chem Consulting  
cc: Pesticide Science and Registration  
cc: 12208 Quinque Lane  
cc: Clifton VA 20124  
cc: (703) 266-0128  
cc: mwbrooks@ag-chem.com  
cc: (703) 266-4377 Fax

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# NOTIFICATION

FEB 17 2011

## MASTER LABEL

### HotShot 70 WG Insecticide

#### Sublabel A: Agricultural Uses

- A. **Field Crops** including cotton, peanut, potato and tobacco.
- B. **Vegetable and Small Fruit Crops** including fruiting vegetables, globe artichoke, herbs, brassica (cole) leafy vegetables, leafy green vegetables, legume vegetables, root, tuberous and corn vegetables and strawberry.
- C. **Tree, Bush and Vine Crops** including banana and plantain, bushberry, caneberry, citrus, coffee, grape, hop, pome fruit, pomegranate, stone fruit, tree nuts and tropical fruit.
- D. **Other Crops** including Christmas tree and poplar/cottonwood.

#### Sublabel B: Turf and Ornamental Uses

- A. **Turf** including turfgrasses around airports, athletic fields, cemeteries, golf courses, homes and multi-family residential buildings, office buildings or office parks, parks and playgrounds, shopping centers and sod farms.
- B. **Trees, Ornamentals, Groundcovers and Interior Landscapes** including evergreens, flowers, foliage plants, groundcovers, interior landscapes, non-bearing fruit and nut trees, ornamentals, shrubs, trees, vegetable plants intended for resale and state, national and private wooded forested areas.

ACTIVE INGREDIENT:

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine.....	70%
INERT INGREDIENTS:.....	30%
TOTAL.....	100%

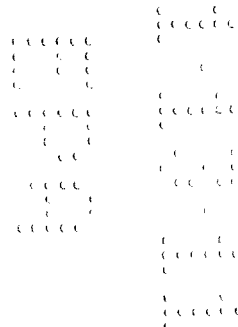
**STOP – Read the label before use**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

EPA Reg. No. 70905-3

EPA Est. No.

**Manufactured by:**  
**SULPHUR MILLS LIMITED**  
 604/605, 349 Business Point, Western Express Highway  
 Andheri (E), Mumbai – 400 069, India  
 Website: [www.sulphurmills.com](http://www.sulphurmills.com)

Net Contents:



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**Sublabel A - Agricultural Uses**

<b>GROUP</b>	<b>4A</b>	<b>INSECTICIDE</b>
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**HotShot 70 WG Insecticide**

**For control of certain insects infesting various crops**

ACTIVE INGREDIENT:	
Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine.....	70%
INERT INGREDIENTS:.....	30%
TOTAL.....	100%

EPA Reg. No. 70905- 3

EPA Est. No.

**STOP – Read the label before use**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

For 24-Hour Emergency Contact, Call CHEMTREC (1-800-424-9300)

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</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 lenses, 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>IF ON SKIN OR 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>
Have a product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
<b>Note to physician:</b> No specific antidote is available. Treat the patient symptomatically.	

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

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering controls statements:**

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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemical detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.**

**SPRAY DRIFT MANAGEMENT**

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

**Mixing and Loading Requirements**

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

**For Aerial Applications**

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

**Importance of Droplet Size**

An important factor influencing drift is droplet size. Small droplets (<150 – 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

**Wind Speed Restrictions**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are great than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

**Restrictions During Temperature Inversions**

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

**Airblast (Air Assist) Specific Applications for Tree Crops and Vineyards**

Release spray at lowest possible height. Do not apply more than 10 feet above the crop canopy. Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow drift management practices as specified.

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

**No-Spray Zone Requirements for Foliar Applications**

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries and commercial fish farm ponds.

**Runoff Management**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, employ the best management practices for minimizing runoff. Consult your local Natural Resources Conservation Service for **recommendations** in your use area.

**Endangered Species Notice**

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

**Resistance Management**

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area to help delay or minimize insect resistance.

HotShot 70 WG Insecticide contains imidacloprid, a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A product may eventually dominate the insect population if Group 4A products are

used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by HotShot 70 WG and to other Group 4A products.

The active ingredient in HotShot 70 WG is a member of the neonicotinoid chemical class. Avoid using a block of more than three consecutive applications of HotShot 70 WG and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Sulphur Mills Ltd. strongly encourages the rotation to a block of applications with effective products of a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Foliar applications of HotShot 70 WG or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Gallant, Impulse, Intruder, Leverage, Nuprid, Pasada, Provado, Trimax Pro and Venom.

Other Group 4A neonicotinoid products uses as soil/seed treatment include: Admire Pro, Advise, Alias, Belay, Couraze, Cruiser, Gaucho, Macho, Macho Max, Nuprid, Platinum, Venom, and Widow.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org>.

### DIRECTIONS FOR USE

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling**

Do not apply this product 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 into 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks



## AGRICULTURAL USES APPLICATION DIRECTIONS

### **Do Not Apply HotShot 70 WG in Enclosed Structures Such As Greenhouses or Planthouses.**

Apply HotShot 70 WG as directed or broadcast foliar spray. Thorough coverage of foliage is necessary without runoff for optimum insecticidal efficacy. Use adequate spray volumes, properly calibrated application equipment and spray adjuvant if necessary to obtain thorough coverage. Failure to provide adequate coverage and retention of HotShot 70 WG on leaves and fruit may result in loss of insect control or delay in onset of activity. HotShot 70 WG may be applied with properly calibrated ground or aerial application equipment. Minimum recommended spray volumes unless otherwise specified on crop specific. Recommended application volumes are 10 gallons/Acre by ground application and 5 gallons/Acre through aerial equipment. HotShot 70 WG may also be applied by overhead chemigation (see additional CHEMIGATION DIRECTIONS FOR USE section below) if allowed in crop specific recommended application section.

HotShot 70 WG use on crops grown for production of true seed intended for private commercial planting is generally not recommended but may be allowed under State specific supplemental labeling. As with any insecticide, care should be taken to minimize exposure of HotShot 70 WG to honey bees and other pollinators. Use of HotShot 70 WG on crops requiring bee pollination should be avoided during bloom and a minimum of 10 days prior to bloom. Additional information on HotShot 70 WG uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCAs, consultants or local Sulphur Mills Limited representatives.

This product may not be effective in controlling established insect infestations or heavy insect populations. Monitor fields for insect presence and level of infestations before making a second application to ensure control. Tank mixes of this product with other registered insecticides will improve knockdown of listed pests and control of other pests.

Do not apply more than 0.5 lb active ingredient per acre, per crop season, regardless of formulation or method of application, unless specified within a crop-specific Recommended Application section for a given crop. Additional product use information may be obtained from calling a representative of Sulphur Mills Limited.

## MIXING INSTRUCTIONS

To prepare the application mixture, add a portion of the required amount of water to the spray tank and with agitation add HotShot 70 WG. Complete filling tank with balance of water needed. Maintain sufficient agitation during both mixing and application. HotShot 70 WG may also be used with other pesticides and/or fertilizer solutions. Please see Compatibility Note below. When tank mixtures of HotShot 70 WG and other pesticides are involved, prepare the tank mixture as recommended above and follow suggested Mixing Order below.

### **Mixing Order**

When pesticide mixtures are needed, add HotShot 70 WG and other wettable powders or wettable granules first, flowable (suspension concentrate) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

### **Compatibility Note**

Test compatibility of the intended tank mixture before adding HotShot 70 WG to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used. For further information, contact your local Sulphur Mills Limited representative.

## CHEMIGATION DIRECTIONS FOR USE

Refer to APPLICATION DIRECTIONS FOR USE section before proceeding with chemigation application.

**Types of Irrigation Systems**

Chemigation applications of HotShot 70 WG may be made to crops through overhead sprinkler chemigation systems if specified in crop-specific Recommended Application sections. Do not apply HotShot 70 WG through any other type of irrigation system.

**Water Volume**

HotShot 70 WG chemigation applications should be made as concentrated as possible. Retention of HotShot 70 WG on target site of insect infestation is necessary for optimum activity. Chemigation of HotShot 70 WG in water volumes exceeding 0.1 inch/Acre is not recommended.

**Uniform Distribution and System Calibration**

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

**Chemigation Monitoring**

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Drift**

Do not apply when the wind speed favors drift beyond the area intended for treatment.

**Required System Safety Devices**

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Using Water from Public Water System**

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water system must contain a functional, reduced pressure zone (RPZ) backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or, in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

<b>ROTATIONAL CROPS *</b>
Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval is required.
<b>Immediate Plant-back</b> All crops on this label plus the following crops not on this label: barley, canola, corn (field, sweet and pop), rapeseed, sorghum, soybean, sugarbeet, and wheat.
<b>30-Day Plant-back</b> Cereals (including buckwheat, millet, oats, rice, rye, and triticale), safflower
<b>10-Month Plant-back</b> Onion and bulb vegetables
<b>12-Month Plant-back</b> All other crops
*Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

### FIELD CROPS

#### Recommended Applications – HotShot 70 WG Insecticide

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. HotShot 70 WG may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. HotShot 70 WG may be tank mixed with other insecticides as recommended for knockdown of pests or for improved control of other pests.

### COTTON

Pests Controlled	Rate Ounces/Acre
Cotton aphid Cotton fleahopper Bandedwinged whitefly Plant bugs (excludes <i>Lygus hesperus</i> ) Green stink bug Southern green stink bug Bollworm/Budworm (ovicidal effect)	0.7 – 1.4
Pests Suppressed	
<i>Lygus</i> bug ( <i>Lygus hesperus</i> ) Whiteflies (other than bandedwinged whitefly)	1.1 – 1.4
<b>Restrictions:</b> Pre-Harvest Interval (PHI): 14 days Minimum interval between application: 7 days Maximum HotShot 70 WG allowed per crop season: 7 ounces/Acre (0.31 lb ai/A) Do not graze treated fields after any application of HotShot 70 WG.	
<b>Applications:</b> - HotShot 70 WG may be applied through properly calibrated ground, aerial or chemigation application equipment.	
<b>Tank Mix Applications</b>	

<b>Pests Controlled (in addition to pests listed above)</b>	<b>HotShot 70 WG Rate Ounces/Acre</b>	<b>Bidrin® 8* Rate Fluid ounces/Acre</b>
<b>For early season control of:</b> Thrips	0.7 – 1.1	1.6 – 3.2
<b>For mid to late season control of:</b> Plant bugs Stink bugs (including Brown stink bug) Grasshoppers Saltmarsh caterpillar Cotton leafperforator	0.7 – 1.1	4.0 – 8.0
<b>Restrictions: (in addition to Restrictions listed above):</b> *Refer to the Bidrin® 8 product label for specific use recommendations; observe all restrictions and precautions that appear on the label.		

**PEANUT\***

<b>Pests Controlled</b>	<b>Rate Ounces/Acre</b>
Aphids Leafhoppers Whiteflies	1.0
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>14 days</b> Minimum interval between application: <b>5 days</b> Maximum HotShot 70 WG allowed per crop season: <b>3 ounces/Acre</b> (0.13 lb ai/A) *Use not permitted in California unless otherwise directed by supplemental labeling.	

**POTATO**

<b>Pests Controlled</b>	<b>Rate Ounces/Acre</b>
Aphids Colorado potato beetle Flea beetles Leafhoppers Psyllids	1.1
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>4.6 ounces/Acre</b> (0.2 lb ai/A)	

**TOBACCO**

<b>Pests Controlled</b>	<b>Rate Ounces/Acre</b>
Aphids	0.6 – 1.2
Flea beetles Japanese beetle	1.2
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>14 days</b> Minimum interval between application: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>6.4 ounces/Acre</b> (0.28 lb ai/A)	

**VEGETABLE AND SMALL FRUIT CROPS**

**Recommended Applications – HotShot 70 WG Insecticide**

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. HotShot 70 WG may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. HotShot 70 WG may be tank mixed with other insecticides as recommended for knockdown of pests or for improved control of other pests.

Crops contained within certain crop groups recognized by EPA are subject to change. Refer to EPA website ([www.epa.gov](http://www.epa.gov)) for latest crop groups.

**FRUITING VEGETABLES\***

**Crops of Crop Group 8 plus Okra Including:** Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet), Tomato, Pepinos, Tomatillo

Pests Controlled	Rate Ounces/Acre
Aphids Colorado potato beetle Leafhoppers Whiteflies	1.1 – 1.8
Pepper weevil (Pepper only)	1.8
<p><b>Restrictions:</b>                      Pre-Harvest Interval (PHI): <b>0 days</b>                      Minimum interval between application: <b>5 days</b>                      Maximum HotShot 70 WG allowed per crop season: <b>5.5 ounces/Acre</b> (0.24 lb ai/A)</p> <p><b>Applications:</b>                      For pepper weevil, apply specified dosage of HotShot 70 WG by ground equipment only, timing applications prior to a damaging population becoming established. Good coverage of foliage and fruit is necessary for optimum control. Applications of HotShot 70 WG must be incorporated into a full-season program, where alternations of effective products from multiple classes of chemistry and different modes of action are utilized in a blocked or windowed approach. For additional information, please contact your Sulphur Mills Limited representative, Extension Specialist or crop advisor.</p> <p>When targeting adult whiteflies, use higher rates.</p> <p>*Not for use on crops grown for seed unless allowed by state-specific supplemental labeling.</p>	

**GLOBE ARTICHOKE**

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers	1.1 – 2.9
<p><b>Restrictions:</b>                      Pre-Harvest Interval (PHI): <b>7 days</b>                      Minimum interval between application: <b>14 days</b>                      Maximum HotShot 70 WG allowed per crop season: <b>11.5 ounces/Acre</b> (0.5 lb ai/A)</p>	

**HERBS\***

**Crops of Crop Subgroup 19A including:** Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Burnet, Chamomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled	Rate Ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	1.0
<p><b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>5 days</b> Maximum HotShot 70 WG allowed per crop season: <b>3.0 ounces/Acre</b> (0.13 lb ai/A)</p> <p><b>Applications:</b> HotShot 70 WG may be applied through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimum control. The addition of an organosilicone-based spray adjuvant at a rate not to exceed the adjuvant manufacturer's recommended use rate may improve coverage and control.</p> <p>Note: Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Sulphur Mills Limited strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.</p> <p>*Use not permitted in California unless otherwise directed by supplemental labeling.</p>	

**BRASSICA (COLE) LEAFY VEGETABLES\***

**Crops of Crop Group 5 including:** Broccoli, Broccoli raab (rapini), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (gai lon) broccoli, Chinese (bok choy) cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens

Pests Controlled	Rate Ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	1.1 – 1.8
<p><b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>5 days</b> Maximum HotShot 70 WG allowed per crop season: <b>5.5 ounces/Acre</b> (0.24 lb ai/A)</p> <p><b>Applications:</b> For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application. Applications must be made to fully leafed-up canopies only.</p> <p>*Not for use on crops grown for seed unless allowed by state-specific supplemental labeling.</p>	

**LEAFY GREEN VEGETABLES\***

**Crops of Crop Subgroup 4A plus Watercress including:** Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach [including New Zealand and vine (Malabar spinach, Indian spinach)], Watercress (Commercial production only. Applications must not be made to native cress growing in streams or other bodies of water.), Watercress (upland)

Pests Controlled	Rate Ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	1.1 – 1.8
<p><b>Restrictions:</b>                      Pre-Harvest Interval (PHI): <b>7 days</b>                      Minimum interval between application: <b>5 days</b>                      Maximum HotShot 70 WG allowed per crop season: <b>5.5 ounces/Acre (0.24 lb ai/A)</b></p> <p><b>Applications:</b>                      For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application. Applications must be made to fully leafed-up canopies only.</p> <p>*Nor for use on crops grown for seed unless allowed by state-specific supplemental labeling.</p>	

**LEGUME VEGETABLES\***

**Crops of Crop Group 6 (except soybean, dry) including:**  
**Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean**  
**Bean** (*Lupinus* spp., including grain lupin, sweet lupin, white lupin, and white sweet lupin)  
**Bean** (*Phaseolus* spp., including field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)  
**Bean** (*Vigna* spp., including adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)  
**Pea:** (*Pisum* spp., including dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)  
**Other Beans and Peas:** Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers Whiteflies	1.0
<p><b>Restrictions:</b>                      Pre-Harvest Interval (PHI): <b>7 days</b>                      Minimum interval between application: <b>7 days</b>                      Maximum HotShot 70 WG allowed per crop season: <b>3.0 ounces/Acre (0.13 lb ai/A)</b></p> <p>*Not for use on crops grown for seed unless allowed by state-specific supplemental labeling.</p>	

**ROOT, TUBEROUS AND CORM VEGETABLES<sup>1</sup>**

**Crops of Crop Group 1 (except sugarbeet) plus Kava including:** Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden)<sup>2</sup>, Burdock (edible)<sup>2</sup>, Canna (edible, Queensland arrowroot), Carrot<sup>2</sup>, Cassava (bitter and sweet)<sup>2</sup>, Celeriac<sup>2</sup>, Chayote (root), Chervil (turnip-rooted)<sup>2</sup>, Chufa, Dasheen (taro)<sup>2</sup>, Ginger, Ginseng, Horseradish, Kava<sup>2,3</sup>, Leren, Parsley (turnip-rooted), Parsnip<sup>2</sup>, Radish<sup>2</sup>, Oriental radish (diakon)<sup>2</sup>, Rutabaga<sup>2</sup>, Salsify (black)<sup>2</sup>, Salsify (oyster plant), Salsify (Spanish), Skirret, Sweetpotato<sup>2</sup>, Tanier (cocoyam)<sup>2</sup>, Tumeric, Turnip<sup>2</sup>, Yam bean (jicama, manioc pea), Yam (true)<sup>2</sup>.

**(For recommended applications on potato see Field Crops section)**

Pests Controlled	Rate Ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	1.0
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>5 days</b> Maximum HotShot 70 WG allowed per crop season: <b>1.0 ounces/Acre</b> (0.044 lb ai/A) on Radish; <b>3.0 ounces Acre</b> (0.13 lb ai/A) on other crops. Maximum HotShot 70 WG applications per crop season: <b>1</b> on Radish; <b>3</b> on other crops.  <sup>1</sup> Not for use on crops grown for seed unless allowed by state-specific supplemental labeling. <sup>2</sup> Tops or greens from these crops may be utilized for food or feed. <sup>3</sup> Use not permitted in California unless otherwise directed by Supplemental Labeling.	

**STRAWBERRY**

Pests Controlled	Rate Ounces/Acre
Aphids Spittlebugs Whiteflies	1.1
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>5 days</b> Maximum HotShot 70 WG allowed per crop season: <b>3.3 ounces/Acre</b> (0.14 lb ai/A) Do not apply during bloom or within 10 days prior to bloom or when bees are actively foraging.	

**TREE, BUSH AND VINE CROPS**

**Applications -- HotShot 70 WG Insecticide**

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. HotShot 70 WG may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. HotShot 70 WG may be tank mixed with other insecticides as recommended for knockdown of pests or for improved control of other pests. Aerial application of HotShot 70 WG may result in slower activity and reduced control relative to results from ground application. For tree and vine crops, recommended application rates are based on full-size, mature trees or vines.

Crops contained within certain crop groups recognized by EPA are subject to change. Refer to EPA website ([www.epa.gov](http://www.epa.gov)) for latest crop groups.

**BANANA AND PLANTAIN\***



Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers Thrips	2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 days</b> Minimum interval between application: <b>14 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.4 ounces/Acre (0.5 lb ai/A)</b>	
<b>Applications:</b> Apply specified dosage of HotShot 70 WG as a broadcast or directed spray to infested area insuring thorough coverage. HotShot 70 WG may be applied through properly calibrated ground and aerial application equipment. Aerial application of HotShot 70 WG may result in slower activity and reduced control relative to results from ground application.	
Addition of an organosilicone adjuvant at a rate not to exceed 2.0 fluid ounces/100 gallons finished spray solution may improve coverage and pest control.	
*Use not permitted in California unless otherwise directed by supplemental labeling.	

## BUSHBERRY

**Crops of Crop Subgroup 13B including:** Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Lingonberry, Salal

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers/Sharpshooters	0.9 – 1.2
Blueberry maggot Japanese beetle (adults) Thrips (foliage feeding thrips only)	1.7 – 2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>3 days</b> Minimum interval between application: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.4 ounces/Acre (0.5 lb ai/A)</b> Maximum number of HotShot 70 WG applications per crop season: <b>5</b>	
<b>Applications:</b> - Do not apply pre-bloom or during bloom or when bees are actively foraging. - Minimum application volume (water): 20 GPA – ground, 5 GPA – aerial	

## CANEBERRY

**Crops of the Caneberry Crop Subgroup 13A including:**

**Blackberry** (*Rubus* spp. – including Andean Blackberry, Arctic blackberry, Bingleberry, Black satin berry, Boysenberry, Brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyene blackberry, Common blackberry, Coryberry, Darrowberry, Dewberry, Dirksen thornless berry, Evergreen blackberry, Himalayaberry, Hullberry, Lavacaberry, Loganberry, Lowberry, Lucretiaberry, Mammoth blackberry, Marionberry, Moras, Mures deronce, Nectarberry, Northern dewberry, Olallieberry, Oregon evergreen berry, Phenomenalberry, Rangeberry, Ravenberry, Rosssberry, Shawnee blackberry, Southern dewberry, Tayberry, Youngberry, Zarzamora, and varieties and/or hybrids of these)

**Raspberry** (*Rubus* spp. – including Bababerry, Black raspberry, Blackcap, Caneberry, Framboise, Frambueso, Himbeere, Keriberry, Mayberry, Red raspberry, Thimbleberry, Tulameen, Yellow raspberry, and varieties and/or hybrids of these, and Wild raspberry)

Pests Controlled	Rate
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	Ounces/Acre
Aphids Leafhoppers Thrips	2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>3 days</b> Minimum interval between application: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>6.9 ounces/Acre</b> (0.3 lb ai/A)	
<b>Applications:</b> - Do not apply pre-bloom or during bloom or when bees are actively foraging.	

**CITRUS**

**Crops of Crop Group 10 including:** Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, White sapote (Casimiroa spp.), and other cultivars and/or hybrids of these

Pests Controlled	Rate Ounces/Acre
Aphids Asian citrus psyllid Blackfly Leafhoppers/Sharpshooters Leafminers Mealybugs Scales Whiteflies	2.9 – 5.7 (depending on tree size, target pest and infestation pressure)
Pests Suppressed	
Thrips (foliage feeding thrips only)	2.9 – 5.7
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 days</b> Minimum interval between application: <b>10 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.4 ounces/Acre</b> (0.5 lb ai/A)	
<b>Applications:</b> - Scales – time applications to the crawler stage. Treat each generation. - Do not apply during bloom or within 10 days prior to bloom or when bees are actively foraging.	

**COFFEE\***

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers Whiteflies	2.3
Pests Suppressed	
Scales	2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.4 ounces/Acre</b> (0.5 lb ai/A) Do not apply during pre-bloom or during bloom or when bees are actively foraging.	
<b>Applications:</b> Apply specified dosage of HotShot 70 WG as a broadcast or directed spray to infested area insuring thorough coverage. HotShot 70 WG may be applied through properly calibrated ground or aerial application equipment.	

Aerial application of HotShot 70 WG may result in slower activity and reduced control relative to results from ground application.

\*Use not permitted in California unless otherwise directed by supplemental labeling.

**GRAPE**

Including: American bunch grape, Muscadine grape and Vinifera grape.

Pests Controlled	Rate Ounces/Acre
Leafhoppers/Sharpshooters Mealybugs	0.9 – 1.1
Grapeleaf Skeletonizer	1.1
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>0 days</b> Minimum interval between application: <b>14 days</b> Maximum HotShot 70 WG allowed per crop season: <b>2.2 ounces/Acre (0.1 lb ai/A)</b>	
<b>Applications:</b> - HotShot 70 WG may be applied by ground application only.	

**HOP**

Pests Controlled	Rate Ounces/Acre
Aphids	2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>28 days</b> Minimum interval between application: <b>21 days</b> Maximum HotShot 70 WG allowed per crop season: <b>6.9 ounces/Acre (0.3 lb ai/A)</b>	

**POME FRUIT**

Crops of Crop Group 11 including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate Ounces/Acre
Leafhoppers	1.3 – 2.3
Aphids (except woolly apple aphid) Apple maggot Leafminers San Jose scale	2.3
<b>FOR PEAR ONLY:</b> Mealybugs Pear psylla	5.7
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between application: <b>10 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.5 ounces/Acre (0.5 lb ai/A)</b>	
<b>Applications:</b> - Do not apply pre-bloom or during bloom or when bees are actively foraging. - Applications targeting apple maggot should be combined with manufacturer's recommended rate of a sticker, such as Nu-Film 17.	

**POMEGRANATE\***

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers/Sharpshooters Whiteflies	2.3
Pests Suppressed	
Scales	2.3
<p><b>Restrictions:</b>            Pre-Harvest Interval (PHI): <b>7 days</b>            Minimum interval between application: <b>7 days</b>            Maximum HotShot 70 WG allowed per crop season: <b>6.9 ounces/Acre (0.3 lb ai/A)</b></p> <p><b>Applications:</b>            - Do not apply pre-bloom or during bloom or when bees are actively foraging.</p> <p><b>Leafhopper:</b> Use the low rate for low to moderate populations of white apple leafhoppers. Use the high rate for high populations or for other leafhopper species. Apply this product while most leafhoppers are in the nymph stage.</p> <p><b>Leafminer: First generation:</b> Apply as soon as pollination is complete and bees are removed from the orchard. For optimal control, apply as early as possible. <b>Second and succeeding generations:</b> Make application early in the adult flight against eff and early instar larvae. For continued and severe pest pressure or overlapping generations, make a second application 10 days later. One application may only result in suppression. This product will not control late instar larvae.</p> <p><b>Mealybug:</b> For best results be sure to thoroughly spray and cover the trunk and scaffolding limbs or other nesting sites.</p> <p><b>Rosy apple aphid:</b> Begin applications before leafrolling.</p> <p><b>San Jose scale:</b> Begin applications at the crawler stage and treat subsequent generations.</p> <p>*Use not permitted in California unless otherwise directed by supplemental labeling.</p>	

## STONE FRUIT

**Crops of Crop Group 12 including:** Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese), Plumcot, Prune (fresh and dried)

Pests Controlled	Rate Ounces/Acre
Aphids Green June beetle Japanese beetle Leafhoppers/Sharpshooters Plant bugs Rose chafer San Jose scale	1.2 - 2.3
Cherry fruit fly	1.7 - 2.3
Pests Suppressed	
Plum curculio Stink bugs	2.3
<p><b>Restrictions:</b>  <b>for Apricot, Nectarine, Peach:</b>            Pre-Harvest Interval (PHI): <b>0 days</b>            Minimum interval between application: <b>7 days</b>            Maximum HotShot 70 WG allowed per crop season: <b>6.9 ounces/Acre (0.3 lb ai/A)</b></p>	

**Applications:**  
 -Minimum application volume (water): 50 GPA – ground; 25 GPA - aerial  
 -Do not apply pre-bloom or during bloom or when bees are actively foraging.

**Notes and Restrictions for Cherries, Plums, Plumcot, Prune**  
 Pre-Harvest Interval (PHI): 7 days  
 Minimum interval between application: 10 days  
 Maximum HotShot 70 WG allowed per crop season: 11.5 ounces/Acre (0.5 lb ai/A)

**Applications:**  
 - Minimum application volume (water): 50 GPA – ground; 25 GPA - aerial  
 - Do not apply pre-bloom or during bloom or when bees are actively foraging.

**TREE NUTS\***

**Crops of Crop Group 14 including:** Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut (black and English)

Pests Controlled	Rate Ounces/Acre
Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters <i>Phylloxera</i> spp. (leaf infestations) Spittlebugs Whiteflies	1.0 – 2.0
Black pecan aphid Mealybugs San Jose scale	2.3

**Restrictions:**  
 Pre-Harvest Interval (PHI): 7 days  
 Minimum interval between application: 6 days  
 Maximum HotShot 70 WG allowed per crop season: 8.2 ounces/Acre (0.36 lb ai/A)

**Applications:**  
 - Minimum application volume (water): 50 GPA – ground; 25 GPA - aerial.  
 - Do not apply pre-bloom or during bloom or when bees are actively foraging.  
 - Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation. Two applications on a 10- to 14-day interval may be required to achieve control.  
 - For Black pecan aphid, use the higher rate to control this pest.  
 - Do not apply after shuck split on pecans.

\*Use not permitted in California unless otherwise directed by supplemental labeling.

**TROPICAL FRUIT**

**Including:** Acerola, Atemoya\*, Avocado, Birida\*, Black sapote, Canistel, Cherimoya\*, Custard apple\*, Feijoa, Jaboticaba, Guava, Llama\*, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapotilla, Soursop\*, Spanish lime, Star apple, Starfruit, Sugar apple\*, Wax jambu

Pests Controlled	Rate Ounces/Acre
Aphids Leafhoppers/Sharpshooters Mealybugs Thrips (foliage feeding thrips only) Whiteflies	2.3
<b>Pests Suppressed</b>	

Scales	2.3
<b>Restrictions:</b> Pre-Harvest Interval (PHI): <b>7 days</b> Minimum interval between applications: <b>10 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.5 ounces/Acre</b> (0.5 lb ai/A)	
<b>Applications:</b> - Maximum number of HotShot 70 WG applications per crop season: <b>5</b> - Do not apply pre-bloom or during bloom or when bees are actively foraging.	
*Use not permitted in California unless otherwise directed by supplemental labeling.	

**OTHER CROPS**

**Applications – HotShot 70 WG Insecticide**

Apply specified rate per acre as a broadcast or directed foliar spray to infested areas as pest populations begin to build. Thorough uniform coverage is necessary to achieve optimum control. A spray adjuvant may be used to improve coverage. HotShot 70 WG may not knockdown established and heavy insect populations. Two applications may be required to achieve control. Scout fields and retreat if needed. HotShot 70 WG may be tank mixed with other insecticides as recommended for knockdown of pests or for improved control of other pests.

**CHRISTMAS TREE**

Pests Controlled	Rate Ounces/Acre
Aphids Adelgids Sawflies	1.2 – 2.3
<b>Restrictions:</b> Minimum interval between applications: <b>7 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.5 ounces/Acre</b> (0.5 lb ai/A)	
<b>Applications:</b> Gall-forming adelgids – time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once galls form spraying will be ineffective.	

**POPLAR/COTTONWOOD\***

Including members of the genus *Populus* grown for pulp or timber

Pests Controlled	Rate Ounces/Acre
Aphids Leaf beetles	1.2 – 2.3
<b>Restrictions:</b> Minimum interval between applications: <b>10 days</b> Maximum HotShot 70 WG allowed per crop season: <b>11.5 ounces/Acre</b> (0.5 lb ai/A)	
<b>Applications:</b> - Do not apply pre-bloom or during bloom or when bees are actively foraging.	
*Use not permitted in California unless otherwise directed by supplemental labeling.	

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Sulphur Mills Limited Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Sulphur Mills Ltd. Emergency Response telephone number is ?.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT: READ BEFORE USE**

**LIMITATION OF WARRANTY AND LIABILITY**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sulphur Mills Limited. All such risks shall be assumed by the user or buyer.

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**Manufactured by:**

**SULPHUR MILLS LIMITED**

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**[label version: 10-14-09)**



### Sublabel B - Turf and Ornamental Uses

GROUP	4A	INSECTICIDE
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## HotShot 70 WG Insecticide

**For control of certain insects infesting turf, trees, ornamentals, groundcovers and interior plantscapes**

ACTIVE INGREDIENT:	
Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine.....	70%
INERT INGREDIENTS:.....	30%
TOTAL.....	100%

EPA Reg. No. 70905-3

EPA Est. No.

**STOP – Read the label before use**  
**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

For 24-Hour Emergency Contact, Call CHEMTREC (1-800-424-9300)

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</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 lenses, 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>IF ON SKIN OR 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>
Have a product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
<b>Note to physician:</b> No specific antidote is available. Treat the patient symptomatically.	

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

Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing.

- Applicators and other handlers must wear:
- Long-sleeved shirt and long pants

- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**Engineering controls statements:**

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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

This product is toxic to wildlife and highly toxic to aquatic invertebrates. Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This chemical demonstrates the properties and characteristics associated with chemical detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

**OBSERVE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.**

**SPRAY DRIFT MANAGEMENT**

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

**Mixing and Loading Requirements**

To avoid potential contamination of groundwater, the use of a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment is recommended. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sinkholes, or field drains.

**For Aerial Applications**

The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

**Importance of Droplet Size**

An important factor influencing drift is droplet size. Small droplets (<150 – 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure.

Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

**Wind Speed Restrictions**

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are great than 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

**Restrictions During Temperature Inversions**

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

**Airblast (Air Assist) Specific Applications for Tree Crops and Vineyards**

Release spray at lowest possible height. Do not apply more than 10 feet above the crop canopy. Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. The following specific drift management practices should be followed:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

**No-Spray Zone Requirements for Foliar Applications**

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries and commercial fish farm ponds.

**Runoff Management**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, Best Management Practices for minimizing runoff should be employed. Consult your local Natural Resources Conservation Service for recommendations in your use area.

**Endangered Species Notice**

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

**Resistance Management**

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, the use of this product should conform to resistance management strategies established for the use area to help delay or minimize insect resistance.

HotShot 70 WG Insecticide contains imidacloprid, a Group 4A insecticide. Insect biotypes with acquired or inherent tolerance to Group 4A product may eventually dominate the insect population if Group 4A products are used repeatedly as the predominant method of control for targeted species. This may eventually result in partial or total loss of control of those species by HotShot 70 WG and to other Group 4A products.

The active ingredient in HotShot 70 WG is a member of the neonicotinoid chemical class. Avoid using a block of more than three consecutive applications of HotShot 70 WG and/or other Group 4A products having the same or similar mode of action. Following a neonicotinoid block of treatments, Sulphur Mills Ltd. strongly encourages the rotation to a block of applications with effective products of a different mode of action before using additional applications of neonicotinoid products. Using a block rotation or windowed approach, along with other IPM practices, is considered an effective use strategy for preventing or delaying an insect pest's ability to develop resistance to this class of chemistry.

Foliar applications of HotShot 70 WG or other Group 4A products from the neonicotinoid chemical class should not be used on crops previously treated with a long-residual, soil-applied product from the neonicotinoid chemical class.

Other Group 4A neonicotinoid products used as foliar treatments include: Actara, Assail, Calypso, Centric, Clutch, Couraze, Gallant, Impulse, Intruder, Leverage, Nuprid, Pasada, Provado, Trimax Pro and Venom.

Other Group 4A neonicotinoid products uses as soil/seed treatment include: Admire Pro, Advise, Alias, Belay, Couraze, Cruiser, Gaucho, Macho, Macho Max, Nuprid, Platinum, Venom, and Widow.

Contact your local extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://irac-online.org>.

### DIRECTIONS FOR USE

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling**

Do not apply this product 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 into 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:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks

**NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses. Keep children and pets off treated areas until dry.

**TURF AND ORNAMENTALS USES  
DIRECTIONS FOR USE**

**PREPARATION OF SPRAY MIXES**

This product is a wettable granule formulation that contains imidacloprid, a systemic insecticide, and readily dissolves in water.

**How to Prepare Spray Solutions**

1. Fill the spray tank with ¼ to 1/3 of the required amount of clear water and begin agitation.
2. Add the specified amount of this product. Allow this product to be mixed thoroughly to provide a uniform spray solution.
3. Fill the tank with the remaining water needed. Maintain sufficient agitation during mixing and application.

If this product is to be tank-mixed with other pesticides and/or fertilizer solutions, check the compatibility (refer to the Tank Mix Compatibility section below) before adding to the spray tank. Use the following order of addition: 1) HotShot 70 WG wettable powder; 2) other wettable powders or wettable granules; 3) flowables or suspension concentrates; 4) emulsifiable concentrates. Run agitator as each component is added. Add the next component only after the previous one is thoroughly mixed. Then add the remaining amount of water to the spray tank. To ensure a uniform spray mixture, maintain constant agitation during both mixing and application.

**Tank Mix Compatibility**

This product has been found to be compatible with commonly used liquid fertilizers, fungicides and insecticides. Before preparing tank mixtures with this product, especially if compatibility is not known, carry out the following small jar test using the desired tank mix partners.

1. Add the proportionate amount of each component in the appropriate order to a pint or a quart jar.
2. Replace the cap, shake for 5 minutes, and allow the mixture to settle for 5 minutes.
3. Observe the jar for signs indicating an incompatible mixture. If the contents can be re-mixed by shaking and readily re-suspends, it is considered compatible. If the mixture separates out, foams, or forms a gel or lumps, then the mixture is not compatible.

**Restrictions**

1. Do NOT apply through any type of irrigation system.
2. Keep children and pets off treated areas until dry.
3. Do not allow livestock to graze in treated areas or use clippings from treated areas for feed or forage.
4. Do not allow runoff of irrigation water.
5. Do not allow puddling of irrigation water.

**Rotation Crops:** Crops which are listed on imidacloprid labels or crops that have existing tolerances for imidacloprid may be planted in treated areas as soon as practical after the last imidacloprid application. Crops that are not found on an imidacloprid label, or crops that do not have existing tolerances for imidacloprid, may not be planted in treated areas for 12-months after the last application. Note that if cover crops are planted any time after an application of this product for soil building or erosion control those crops may not be grazed or harvested for food or feed.

**TURF**

This product will control or suppress soil-inhabiting pests in lawns or grassy areas in residential and non-residential areas and sod farms (refer to table below for sites). Best control is obtained when applications are made before or during the egg laying period. Irrigation is required after application to ensure residues of this product are moved through the thatch and into the soil layer. Refer to the table below for additional application instructions. Additional information on when to apply can be obtained from your local Agricultural Experiment Station, State Extension Turf Specialist, or Sulphur Mills Limited representative.

**Turfgrasses around airports, athletic fields, cemeteries, golf courses, homes and multi-family residential buildings, office buildings or office parks, parks and playgrounds, shopping centers, and sod farms**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Larvae of: Annual bluegrass weevil Asiatic garden beetle Billbugs Black turfgrass ataenius Cutworms (suppression only) European Chafer European Crane Fly Green June beetle Japanese beetle Northern masked chafer Oriental beetle <i>Phyllophaga</i> spp. Southern masked chafer	1.0 – 2.0 tsp. (5.8 – 9.2 ounces/acre)  OR  1.25 – 2.0 tsp. (7.0 – 9.2 ounces/acre)
Chinchbugs (suppression only) Mole Crickets	2.0 tsp. (9.2 ounces/acre)

**Restrictions:**  
 Do not apply more than 9.2 oz (0.4 lb of active ingredient) per acre per year.  
 Do not apply through any irrigation system.

**Applications:**  
 Apply this product in sufficient water to ensure the turf receives an even uniform distribution of spray. Accurately calibrated equipment normally used for soil application of insecticides must be used and calibration must be checked often to ensure equipment works properly. Equipment that produces uniform, coarse droplet sprays with a low pressure setting will help to eliminate drift to non-target sites.

In order for this product to be adequately distributed, do not apply the product to waterlogged grassy areas or to water-saturated soils.

Rainfall or irrigation must occur within 24 hours of application to move this product vertically through the thatch and into the soil.  
 Wait until after sufficient rainfall or irrigation has occurred to mow the grass.

**Annual Bluegrass weevil, Billbugs, European Crane Fly, and Grubs:** For best results make applications before egg hatch.

**Chinchbugs:** Make applications before hatching of first instar nymphs.

**Mole Crickets:** Make applications before or during the peak egg hatching period. This product may be applied with a remedial insecticide when adults or large nymphs are present and actively tunneling.

**Equivalents:** 3 level teaspoons = 1 level tablespoon  
 1 level teaspoon = 3.4 grams of this product

**TREES, ORNAMENTALS, GROUNDCOVERS AND INTERIOR PLANTSCAPES**

This product may be applied by broadcast or foliar application to evergreens, flowers, foliage plants, groundcovers, interior plantscapes, non-bearing fruit and nut trees, ornamentals, shrubs, trees, vegetable plants intended for resale, and state, national, and private wooded forested areas (refer to table below for sites) to control or suppress insects. This product is a systemic insecticide that is absorbed by the roots and moves upward into the plant. For this product to control insects, it must come in contact with growing parts of the plant. Plant absorption of this product may be increased in some cases if it is applied with a fertilizer that contains nitrogen. Plants absorb this product from either foliar or soil applications. Refer to the table below for further instructions.

**Woody Perennials:** Protection in woody perennials is slower than in herbaceous species. Expect a delay of 2 or more weeks with longer delays for larger plants. Because of this, make applications to woody perennials well in advance of expected insect activity.

**Bark Media:** This product treatments to media with 30-50% or more bark content may confer a shorter period of protection.

**Trees and Shrubs, Evergreens, Flowers, Ornamentals, Groundcovers, and Interior Plantscapes in and around residential, industrial, and commercial buildings and state, national, and private wooded and forested areas**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Adelgids Aphids Japanese beetle (adult) Lacebugs Leaf beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Sawfly larvae Thrips (suppression only) Whiteflies	<p style="text-align: center;"><b>Foliar application:</b></p> 0.125 tsp. in 2.5 gal. water 0.25 tsp. in 5 gal. water 0.5 tsp. in 10 gal. water 1.25 tsp. in 25 gal. water 2.5 tsp. in 50 gal. water 5 tsp. in 100 gal. water
White grub larvae (including Asiatic garden beetle, chafers, <i>Phyllophaga</i> spp., Japanese beetle larvae, and Oriental beetle)	<p style="text-align: center;"><b>Broadcast application:</b></p> 1.25 – 2.0 level teaspoons per 1,000 sq. ft. (7.0 – 9.2 ounces/acre)
<p><b>Restrictions:</b>  <b>Outdoor ornamentals:</b> Do not apply by broadcast application more than 9.2 oz (0.4 lb active ingredient) per acre per year.</p> <p><b>Applications:</b>  <b>Foliar Application:</b> Apply this product in a sufficient volume of water to uniformly cover the treated area. Foliar applications will provide systemic activity against target pests.</p> <p>If plants (such as holly, pine or ivy) have foliage that is difficult to wet, Sulphur Mills Limited recommends this product be applied with a spreader/sticker.</p> <p>Time applications to occur before heavy pest populations arise; make repeat applications as necessary.</p> <p><b>Broadcast Application:</b> Mix the specified amount of this product in a sufficient volume of water to uniformly over the treatment area. Apply in a minimum of 2 gallons of water per 1,000 sq. ft. After application, irrigate the treated areas to incorporate this product into the upper soil.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	

**Trees in and around residential, industrial, and commercial buildings, Interior plantscapes and state, national, and private wooded and forested areas**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Adelgids Aphids Armored Scale (suppression only) Black vine weevil larvae Emerald Ash Borer Eucalyptus Longhorned Borers Flatheaded Borers (including bronze birch and alder borers) Japanese Beetles (adults) Lacebugs Leaf Beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Pine Tip Moth larvae Psyllids Royal Palm Bugs Sawfly larvae Soft Scales Thrips (suppression only) White grub larvae Whiteflies	<p style="text-align: center;"><b>Soil Injection and Soil Drench:</b>                      0.25 – 0.5 level teaspoons per inch                      of trunk diameter (DBH)</p> <p style="text-align: center;">or</p> <p style="text-align: center;">1 – 2 oz per 30 cumulative inches                      of trunk diameter (DBH)</p>
<p><b>Restrictions:</b>                      Do not apply this product by soil injection in Nassau or Suffolk Counties in the state of New York.                      Do not apply more than 9.2 oz (0.4 lb of active ingredient) per acre per year.</p> <p><b>Applications</b>  <b>Soil Injection:</b> Use at least 4 holes per tree.  <b>Grid System:</b> Space injection holes on 2.5 ft. centers that extend to the drip line of the tree.  <b>Circle System:</b> Evenly space injection holes in circles from the drip line in toward the trunk. More than one circle may be needed depending on tree size.  <b>Basal System:</b> Place injection holes evenly around the base of the tree trunk that extends only 6 to 12 inches from the base.</p> <p>Prepare this product in a sufficient volume of water so an equal amount of solution is injected into each hole using a low pressure. Use enough solution so that it reaches the root zone. Irrigation or rainfall for 7-10 days after application will provide optimum control.</p> <p><b>Soil Drench:</b> Before application, be sure there are no physical barriers (such as plastic tarp) present that may prevent the solution from reaching the root zone. Apply in a minimum of 10 gallons of water per 1,000 sq. ft. Apply the spray solution uniformly around the base of the tree ensuring the drench is directed at the root zone.</p> <p><b>Borers:</b> If trees are heavily infested, an application of this product may not prevent the loss of the trees from existing pest damage and tree stress.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	



**Shrubs in and around residential, industrial, and commercial buildings and state, national, and private wooded areas**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Adelgids Aphids Armored Scale (suppression only) Black vine weevil larvae Emerald Ash Borer Eucalyptus Longhorned Borers Flatheaded Borers (including bronze birch and alder borers) Japanese Beetles (adults) Lacebugs Leaf Beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Pine Tip Moth larvae Psyllids Royal Palm Bugs Sawfly larvae Soft Scales Thrips (suppression only) White grub larvae Whiteflies	<p style="text-align: center;"><b>Soil Injection and Soil Drench:</b>                      0.25 – 0.5 level teaspoons per foot of shrub height</p> <p style="text-align: center;">or</p> <p style="text-align: center;">1 – 2 oz per 30 cumulative feet of shrub height</p>
<p><b>Restrictions:</b>                      Do not apply this product by soil injection in Nassau or Suffolk Counties in the state of New York. Do not apply more than 9.2 oz (0.4 lb of active ingredient) per acre per year.</p> <p><b>Applications:</b>  <b>Soil Injection:</b> Use at least 4 holes per shrub. Prepare this product in a sufficient volume of water so an equal amount of solution is injected into each hole using a low pressure. Use enough solution so that it reaches the root zone of the individual shrubs. Irrigation or rainfall for 7-10 days after application will provide optimum control.</p> <p><b>Soil Drench:</b> Before application, be sure there are no physical barriers (such as plastic tarp) present that may prevent the solution from reaching the root zone. Apply in a minimum of 10 gallons of water per 1,000 sq. ft. Apply the spray solution uniformly around the base of the tree ensuring the drench is directed at the root zone.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	

**Flowers and Ground covers in and around residential, industrial, and commercial buildings and state, national, and private wooded areas**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Adelgids Aphids Armored Scale (suppression only) Black vine weevil larvae Emerald Ash Borer Eucalyptus Longhorned Borers Flatheaded Borers (including bronze birch and alder borers) Japanese Beetles (adults) Lacebugs Leaf Beetles (including elm and viburnum leaf beetles) Leafhoppers (including glassy-winged sharpshooter) Leafminers Mealybugs Pine Tip Moth larvae Psyllids Royal Palm Bugs Sawfly larvae Soft Scales Thrips (suppression only) White grub larvae Whiteflies	<b>Broadcast application:</b> 1.25 – 2.0 level teaspoons per 1,000 sq. ft. (7.0 – 9.2 ounces/acre)
<p><b>Restrictions:</b> Do not apply more than 9.2 oz (0.4 lb of active ingredient) per acre per year.</p> <p><b>Applications:</b> <b>Applications Prior to Planting Plants or to Established Plants:</b> After application, this product must be incorporated into the soil. Irrigation to established plants after application will provide best results.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon 1 level teaspoon = 3.4 grams of this product</p>	

**To Manage Ants in the Ornamentals listed above**

Pests Controlled	Number of Teaspoons of Product to Treat 1,000 Sq. Ft. (Ounces/Acre)
Aphids Scale Mealy Bugs Other Sucking Insects	See above
<p><b>Applications:</b> When this product is used to control these insects, ants are also controlled by limiting the honeydew available as a food source for the ants. This product may be used as a supplemental to other commonly used methods (bait traps, residual sprays, etc.) that help eliminate unwanted ants in ornamentals.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon 1 level teaspoon = 3.4 grams of this product</p>	

**Pome Fruit in and around Residential Areas including: apple, crabapple, loquat, mayhaw, pear (including Oriental pear), quince**

Pests Controlled	Use Rate
Aphids (except Wooly apple aphid) Leafhoppers (including glassy-winged sharpshooter) Leafminer Mealybugs San Jose Scale	0.5 oz per 100 gal. (equivalent to 2 oz product per acre)
<p><b>Restrictions:</b>                      California: Do not apply this product to control mealybugs and San Jose Scale on pears.                      Wait at least 10 days in between applications.                      Do not apply more than 2.1 oz per acre per application                      Make only 5 applications per year.                      Harvest fruit 7 days or longer after the last application.</p> <p><b>Applications:</b>  <b>Foliar Application:</b> Apply as needed after petal-fall. The use rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees; therefore, adjust the amount of this product depending on the tree size and amount of foliage present.</p> <p><b>Rosy Apple Aphid:</b> Apply prior to leaf rolling.  <b>Leafhopper:</b> For late season (preharvest) control, apply while most leafhoppers are in the nymph stage.  <b>Leafminer: First generation</b> – Apply as soon as pollination is complete and bees are removed from the orchard. For optimal control, apply as early as possible. <b>Second and succeeding generations</b> - Make applications early in the adult fight against eff and early instar larvae. For continued and severe pest pressure or overlapping generations, make a second application 10 days later. One application may only result in suppression. This product will not control late instar larvae.  <b>Mealybug:</b> For best results, be sure to thoroughly spray and cover the trunk and scaffolding limbs or other nesting sites.  <b>San Jose Scale:</b> Time applications to the crawler stage and treat each generation. Do not use this product on this pest in pears in the state of California.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	

**Pecans in and around Residential Areas**

Pests Controlled	Use Rate
Yellow pecan aphid Black margined aphid Pecan leaf phylloxera Pecan spittlebug Pecan stem phylloxera	0.5 oz per 100 gal. (equivalent to 2 oz product per acre)
<p><b>Restrictions:</b>                      Do not apply in the state of California unless otherwise directed by a supplemental label.                      Wait at least 10 days in between applications.                      Make only 3 applications per year.                      Do not apply more than 6.3 oz of this product per acre per year.</p> <p><b>Applications:</b>  <b>Foliar Application:</b> Apply as needed as pest pressure builds but before infestation is extremely heavy. The use rate per acre is based on a standard of 400 gallons of dilute spray per acre for large trees; therefore, adjust the amount of this product depending on the tree size and amount of foliage present. Adequate control may be achieved only with two applications at 10-14 day intervals. For best results, thorough and uniform spray coverage of foliage is necessary. To improve coverage, use an organosilicone-based spray adjuvant.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	

**Ornamental Grapes in and Around Industrial and Commercial Buildings, and Residential Areas**

Pests Controlled	Use Rate
Leafhoppers (including glassy-winged sharpshooter) Mealybugs	0.5 oz per 100 gal. (equivalent to 2 oz product per acre)
<p><b>Restrictions:</b>                      Wait at least 14 days in between applications.                      Do not apply more than 2 oz of this product per acre per year.                      Fruit may be harvested on the day of the last application.</p> <p><b>Applications:</b>                      Apply as a foliar spray using 200 gallons of water per acre.</p> <p><b>Equivalents:</b> 3 level teaspoons = 1 level tablespoon                      1 level teaspoon = 3.4 grams of this product</p>	

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Sulphur Mills Limited Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Sulphur Mills Ltd. Emergency Response telephone number is ?.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT: READ BEFORE USE**

**LIMITATION OF WARRANTY AND LIABILITY**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Sulphur Mills Limited. All such risks shall be assumed by the user or buyer.

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