

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

May 2, 2018

Keeva Shultz Agent for Prime Source, LLC c/o Wagner Regulatory Associates, Inc. PO Box 640 7227 Lancaster Pike, Suite A Hockessin, DE 19707

Subject: PRIA Label and CSF Amendment – Revises Label: Update Signal Word; Revises First Aid; Updates Precautionary Statements; Revises Basic CSF dated 12/14/2017 Product Name: Chlorothalonil 720 Select EPA Registration Number: 89442-9 Application Date: December 14, 2017 Decision Number: 536578

Dear Ms. Shultz:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSF:

• Basic CSF dated 12/14/2017

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the

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website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

If you have any questions, please contact Heather Garvie by phone at 703 308-0034, or via email at garvie.heather@epa.gov; or Craig Reeves by phone at 703 347-0486, or via email at reeves.craig@epa.gov.

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Heather A. Garvie Acting Product Manager 22 Fungicide Branch Registration Division

Enclosure: Stamped Label

# **Chlorothalonil 720 Select**

ACTIVE INGREDIENT:	% by Weight
Chlorothalonil (tetrachloroisophthalonitrile):	
OTHER INGREDIENTS:	<u>46.0%</u>
TOTAL:	
Contains C. O. noveda Chlavathalanil nan callan (720 arama nan litar)	

Contains 6.0 pounds Chlorothalonil per gallon (720 grams per liter)

# KEEP OUT OF REACH OF CHILDREN CAUTION



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

	FIRST AID			
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice.			
	Have person sip a glass of water if able to swallow.			
	• Do not induce vomiting unless told to do so by a poison control center or doctor.			
	<ul> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
IF INHALED:	Move person to fresh air.			
	• If person is not breathing, call 911 or an ambulance, give artificial respiration immediately,			
	preferably by mouth-to-mouth, if possible.			
	Call a poison control center or doctor for further treatment advice.			
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> </ul>			
	• Remove contact lenses, if present, after the first 5 minutes then continue rinsing eye.			
	Call a poison control center or doctor for treatment advice.			
Have the product label with you when calling a poison control center or doctor, or going for treatment. For emergency				
information concerning this product, call your poison control center at <b>1-800-222-1222</b> .				
NOTE TO PHYSICIAN:	NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral			
antihistamines and topical	or oral steroids.			

[Optional referral statements when booklets and container labels are used:

See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use.

See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for additional Precautionary Statements Directions For Use, and Storage and Disposal.

See label booklet for complete Directions For Use.]

EPA Reg. No.: 89442-9

Net Contents: \_\_\_\_\_ gals.

EPA Est. No.: \_\_\_\_\_

Manufactured For: Prime Source, LLC P.O. Box 250 10025 Hwy. 264 Alternate Middlesex, NC 27557

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed absorbed through skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

### Mixers, Loaders, Applicators and All Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl chloride, or viton
- Shoes plus socks

#### For enclosed areas including greenhouses; Mixers, Loaders, Applicators, and All 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, polyethylene, polyvinyl chloride, or viton
- Shoes plus socks
- A minimum of a NIOSH-approved particulate filtering facepiece respirator with any N\*, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N\*, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter.

\*if this product is being mixed with oil, the N filter must not be used.

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

### ENGINEERING CONTROLS STATEMENT

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:**

- ould:
- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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 aquatic invertebrates and wildlife. DO NOT apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment wash water or rinsate.

Chlorothalonil can contaminate surface water through spray drift. DO NOT apply when weather conditions favor drift from treated areas. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

Chlorothalonil degradates are known to leach through soil into ground water under certain conditions as a result of label use. Use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

# **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, or pets either directly or through drift. Only protected handlers may be in the area during applications. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

DO NOT use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, recreational park athletic fields, athletic fields located on or next to schools (i.e., elementary, middle, and high schools), campgrounds, churches, and theme parks.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

### Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyethylene, polyvinyl chloride, or viton
- Shoes plus socks
- Protective eyewear

**Special Eye Irritation Provisions:** This product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6½ days entry is permitted only when the following safety measures are provided:

- At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area.
- Workers must be informed, in a manner that they can understand:
  - That residues in the treated area may be highly irritating to their eyes;
  - That they must take precautions, such as refraining from rubbing their eyes, to keep the residues out of their eyes;
  - That if they do get residues in their eyes, they must immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water; and
  - How to operate the eyeflush container.

### 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, or greenhouses.

### Do not enter or allow others to enter into treated areas until deposits have dried.

Do not apply this product within 150 feet (for aerial and air-blast application); or 25 feet (for ground applications) from marine/estuarine water bodies unless there is an untreated buffer area of that width between the area to be treated and the water body.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weatherrelated factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

- 1) The distance of the outer most nozzles on the boom must not exceed <sup>3</sup>/<sub>4</sub> the length of the wingspan or rotor.
- 2) Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they must be observed.

### AERIAL DRIFT REDUCTION ADVISORY INFORMATION

### Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environment conditions (see **Wind**, **Temperature and Humidity**, and **Temperature Inversions**).

### **Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.

• Nozzle Type - Use a nozzle that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

#### **Boom Length**

For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

### Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making application at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

#### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

#### **Temperature and Humidity**

When making applications in low relative humidity, set-up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

#### **Temperature Inversions**

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures 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 or an aircraft generator. 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 air mixing.

### **Integrated Pest Management**

**Chlorothalonil 720 Select** is an excellent disease control agent when used according to label directions for control of a broadspectrum of plant diseases. This product is labeled for use in programs that are compatible with the principles of Integrated Pest Management (IPM), including the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems which reduce unnecessary applications of pesticides.

### Fungicide Resistance Management

**Chlorothalonil 720 Select** is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk from disease resistance exhibit a single-site mode of fungicidal action. This product, with a multisite mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of this product in programs which seek to minimize the occurrence of disease resistance to other fungicides.

#### Mixing, Loading, and Applying

**Chlorothalonil 720 Select** is intended to be diluted into water, then applied to crops by typical agricultural spraying techniques. **Always apply this product in sufficient water to obtain thorough, uniform coverage of foliage and crop surfaces intended to be protected from disease.** Spray volume to be used will vary with crop and amount of plant growth. For field and row crops, spray volume should normally range from 20 to 150 gallons per acre (200 to 1,400 liters per hectare) for dilute sprays and 5 to 10 gallons per acre (50 to 100 liters per hectare) for concentrate ground sprays and aircraft applications. For fruit and nut crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the crop directions. For conifers, the maximum volume is 100 gallons per acre. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop.

Slowly invert container several times to assure uniform mixture. Measure the required amount of **Chlorothalonil 720 Select** and pour into the spray tank during filling. Keep agitator running when filling spray tank and during spray operations.

Do not use on greenhouse-grown crops except as directed in the **Ornamental Plants** section of this label.

#### **Tank Mixing**

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

**Chlorothalonil 720 Select** can be tank mixed with ActinoGrow (*Streptomyces lydicus* WYEC 108) for the control of diseases in soybeans as specified on both this and the ActinoGrow label (see the Application Rate Table for details). Observe all applicable directions, precautions, and limitations on the **Chlorothalonil 720 Select** and ActinoGrow label (EPA Reg. No. 73314-1) when applying these products.

Do not combine **Chlorothalonil 720 Select** in a sprayer tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and non-injurious under your conditions of use. Do not combine this product with Dipel 4L, Foil, Triton AG-98, Triton B-1956 or Latron B-1956, as phytotoxicity may result from the combination when applied to the crops on this label. DO NOT tank mix this product with oil, or with any adjuvants which contain oil as their principal ingredient. When an adjuvant is to be used with this product, Prime Source, LLC recommends the use of a Chemical Producers and Distributors Association (CPDA) certified adjuvant. Do not use with Copper-Count-N in concentrated spray suspensions.

### **Applications Through Sprinkler Irrigation Systems (Chemigation)**

Application through sprinkler irrigation systems is recommended only for those specific crops for which chemigation is listed in the application directions in the crop charts.

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set and portable (wheel move, side roll, end tow, or hand move) irrigation system(s). DO NOT apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

DO NOT apply this product through irrigation systems connected to a 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 per year.

Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injections when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise.

The irrigation water pipeline must be fitted with a functional, automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain, located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source.

Always inject **Chlorothalonil 720 Select** into irrigation water after it discharges from the irrigation pump and after it passes through the check valve. Never inject pesticides into the intake line on the suction side of the pump.

Pesticide injection equipment must be fitted with a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump. Interlock this valve to the power system, so as to prevent fluid from being withdrawn from the chemical supply tank when the irrigation system is either automatically or manually turned off.

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 irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the pressure decreases to the point where pesticide distribution is adversely affected.

Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur. DO NOT apply when wind speed favors drift beyond the area intended for treatment.

**Chlorothalonil 720 Select** may be used through two basic types of sprinkler irrigation systems as outlined in Sections A and B below. Determine which type of system is in place, then refer to the appropriate directions provided for each type.

### A. Center Pivot, Motorized Lateral Move and Traveling Gun Irrigation Equipment

For injection of pesticides, these continuously moving systems must use a metering pump, such as a positive displacement injection pump of either diaphragm or piston type, constructed of materials that are compatible with pesticides, fitted with a system interlock, and capable of injection at pressures approximately 2 to 3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix specified amount of **Chlorothalonil 720 Select** for acreage to be covered into same amount of water used during calibration and inject into system continuously for one

revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until this product has been cleared from last sprinkler head.

### B. Solid Set and Portable (Wheel Move, Side Roll, End Tow, or Hand Move) Irrigation Equipment

With stationary systems, an effectively designed in-line venturi applicator unit is preferred which is constructed of materials that are compatible with pesticides; however, a positive-displacement pump can also be used.

Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of **Chlorothalonil 720 Select** for acreage to be covered with water so that the total mixture of this product plus water in the injection tank is equal to the quantity of water used during calibration and operate entire system at normal pressures specified by the manufacturer of injection equipment used for amount of time established during calibration. No agitation should be required. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until this product has been cleared from last sprinkler head.

### **Application Rates**

Dosage rates on this label indicate pounds of **Chlorothalonil 720 Select** per acre, unless otherwise stated. Under conditions favoring disease development, the high rate specified and shortest application interval should be used.

For each crop use situation listed below, the listed maximum individual and seasonal application rates must not be exceeded and the listed minimum retreatment intervals must not be decreased.

Crop	Diseases	Rate Per Acre (Pints)	Application Instructions
Asparagus	Rust ( <i>Puccinia asparagus</i> ) Purple spot ( <i>Puccinia asparagi</i> ) Cercospora blight ( <i>C. asparagi</i> )	2.0 - 4.0	<ul> <li>Apply after harvesting spears, when conditions favor disease development on ferns, generally when leaf wetness occurs. Repeat applications at 2- to 4-week intervals until ferns are not productive. Use the higher rate within the specified rate range and shortest interval when conditions favor disease.</li> <li>Restrictions: <ul> <li>Apply by air or ground.</li> <li>PHI: 190 days (120 days in California)</li> <li>Maximum lbs. a.i./A per year: 9.0</li> </ul> </li> </ul>
Beans (Snap)	Rust (Uromyces appendiculatus)	1.38 - 3.0	Begin applications during early bloom stage or when disease first threatens and repeat at 7-day intervals or
	Grey mold (Botrytis cinerea)	3.0	as necessary to maintain control.
			<ul> <li>Restrictions:</li> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 7 days</li> <li>Maximum lbs. a.i./A per year: 9.0</li> </ul>
Dried Shelled Pea and Bean (Except	Rust (Uromyces appendiculatus) Anthracnose (Colletotrichum lindemuthianum)	1.38 - 2.0	Begin applications during early bloom stage and repeat at 7- to 10-day intervals.
Soybean)* Beans: adzuki, broad, dry, grain lupin, jackbean, lablab, lupin, navy, kidney, lima, moth, mung, pink, pinto, rice, runner, tepary, urd,	Downy mildew ( <i>Phytophthora</i> ) Cercospora leaf spot ( <i>C. cruenta</i> ) Ascochyta blight ( <i>A. phaseolorum</i> )		<ul> <li>Restrictions:</li> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 14 days</li> <li>Maximum lbs. a.i./A per year: 6.0</li> <li>For use only on beans to be harvested dry with pods removed.</li> <li>*Not approved on dry beans in California.</li> </ul>
Peas: blackeyed, catjang, chickpea (garbanzo), cowpea, Southern			
Brassica (Head and Stem): Broccoli	Alternaria leaf spot ( <i>Alternaria</i> spp.) Downy Mildew ( <i>Peronospora</i> parasitica)	1.5	Start applications when transplants are set in field, or shortly after emergence of field-seeded crop, or when conditions favor disease development. Repeat at 7- to

### Field and Row Crops

			Page 7 01
Brussels sprouts Cabbage Chinese cabbage (tight headed varieties and Napa) Chinese Mustard Cauliflower Chinese Broccoli Cavalo (Broccolo, Kohlrabi)	Ring spot ( <i>Mycosphaerella</i> <i>brassicicola</i> ) (California only)	2.0	<ul> <li>10-day intervals to maintain control.</li> <li>Restrictions: <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 7 days</li> <li>Maximum lbs. a.i./A per year: 8.8</li> </ul> </li> </ul>
Carrot	Early blight ( <i>Cercospora carotae</i> ) Late blight ( <i>Alternaria dauci</i> )	1.5 - 2.0	Start applications when disease threatens and repeat at 7- to 10-day intervals to maintain control. Restrictions: • Apply by air, ground, or chemigation. • PHI: 0 days • Maximum lbs. a.i./A per year: 15.0
Celery	Early blight ( <i>Cercospora apii</i> ) Late blight ( <i>Septoria apicola</i> ) Basal stalk rot ( <i>Rhizoctonia solani</i> ) Pink rot (suppression) ( <i>Sclerotinia</i> <i>sclerotiorum</i> )	1 - 1.5 -OR- 2.0 - 3.0 3.0	Start applications shortly after crop emergence or when transplants are set in the field. For the indicated rates, re-apply at: 1 - 1.5 pts. rate: 3- to 5-day intervals 2.0 - 3.0 pts. rate: 7-day intervals <b>Restrictions:</b> • Apply by air, ground, or chemigation. • PHI: 7 days • Maximum lbs. a.i./A per year: 18.0
Corn (Sweet) Corn Grown For Seed	Helminthosporium leaf blights ( <i>Helminthosporium</i> spp.) Rust ( <i>Puccinia</i> spp.)	0.75 - 2.0	<ul> <li>Begin applications when conditions favor disease development and repeat at 7-day intervals. Use 1.5 - 2.0 pints when disease pressure is severe.</li> <li>Restrictions: <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 14 days</li> <li>Maximum lbs. a.i./A per year: 9.0</li> <li>Do not allow livestock to graze in treated fields.</li> <li>Do not ensile treated corn or use as livestock forage.</li> <li>Do not apply to sweet corn to be processed.</li> </ul> </li> </ul>
<b>Cucurbits:</b> Cantaloupe Chayote (fruit) Chinese	Anthracnose ( <i>Colletotrichum</i> spp.) Downy mildew ( <i>Pseudoperonospora</i> <i>cubensis</i> ) Target spot ( <i>Corynespora cassiicola</i> )	1.5 - 2.0	Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7-day intervals.
Waxgourd (Chinese preserving melon) Cucumber <i>Momordica</i> spp. (includes Balsam apple, bitter melon) Muskmelon Squash Pumpkin Watermelon Zucchini Including cultivars and/or hybrids of these.	Cercospora leaf spot ( <i>Cercospora</i> <i>citrullina</i> ) Gummy stem blight/vine decline ( <i>Didymella bryoniae</i> ) Alternaria leaf blight ( <i>Alternaria</i> <i>cucumerina</i> ) Alternaria leaf spot ( <i>Alternaria</i> <i>alternata</i> ) Scab ( <i>Cladosporium cucumerinum</i> ) Powdery mildew ( <i>Podosphaera xanthii</i> syn. <i>Sphaerotheca fuliginea</i> )	2.0 - 3.0	<ul> <li>Note: Spraying mature watermelons may result in sunburn of the upper surface of the fruit. DO NOT apply Chlorothalonil 720 Select to watermelon when any of the following conditions are present:         <ol> <li>Intense heat and sunlight;</li> <li>Drought conditions;</li> <li>Poor vine canopy;</li> <li>Other crop and environmental conditions which may be conducive to increased natural sunburn.</li> </ol> </li> <li>DO NOT combine Chlorothalonil 720 Select with anything except water for application to watermelons unless your prior use has shown the combination to be non-injurious to watermelons under your conditions of use.</li> <li>Restrictions:         <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 0 days</li> <li>Maximum lbs. a.i./A per year: 15.75</li> </ul> </li> </ul>
Fruiting Vegetables (Except	Anthracnose ( <i>Colletotrichum</i> spp.) Botrytis leaf mold ( <i>Botrytis cinera</i> ) Cercospora leaf spot ( <i>Cercospora</i> spp.)	1.5	Begin applications as a foliage, flower and fruit spray when disease is anticipated. Repeat applications at 7- to 10-day intervals.

Tomato)	Powdery mildew ( <i>Leveillula taurica</i> )		
Eggplant Groundcherry Okra Pepino Pepper (including bell pepper, chili pepper, cooking pepper, pimento, sweet pepper) Tomatillo			Restrictions: • Apply by air, ground, or chemigation. • PHI: 3 days • Maximum Ibs. a.i./A per year: 9.0
Ginseng	Alternaria blight ( <i>Alternaria panax</i> ) Grey mold ( <i>Botrytis cinerea</i> )	2.0	<ul> <li>Start applications when disease threatens and repeat at 7- to 10-day intervals to maintain control. Use in sufficient water to obtain adequate coverage.</li> <li>Restrictions: <ul> <li>Apply by air or ground.</li> <li>PHI: 14 days</li> </ul> </li> </ul>
Grasses Grown for Seed	Stem rust ( <i>Puccinia</i> spp.) Leaf rust ( <i>Puccinia</i> spp.) Stripe rust ( <i>Puccinia</i> spp.) Septoria leaf spot ( <i>Septoria</i> spp.) Glume blotch ( <i>Septoria</i> spp.) Bipolaris ( <i>Bipolaris</i> spp.) Drechslera leaf spots ( <i>Drechslera</i> spp.)	1.0 - 1 .5	<ul> <li>Maximum lbs. a.i./A per year: 12.0</li> <li>Begin applications during stem elongation when conditions favor disease development. Re-apply at flag (top) leaf emergence and repeat applications at 14-day intervals.</li> <li>Restrictions:         <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 14 days</li> </ul> </li> </ul>
	Eyespot ( <i>Selenophoma</i> spp.)	1.0 - 2.0	<ul> <li>Maximum lbs. a.i./A per year: 4.5</li> <li>DO NOT allow livestock to graze in treated areas or feed hay produced before harvest. Feeding of treated plant parts after harvest of seed is allowed.</li> </ul>
Horseradish	Ramularia stem and leaf spot ( <i>Ramularia armoraciae</i> )	3.0	<ul> <li>Start applications when disease threatens and repeat at 7- to 10-day intervals to maintain control. Use in sufficient water to obtain adequate coverage.</li> <li>Restrictions: <ul> <li>Apply by air or ground.</li> <li>PHI: 14 days</li> <li>Maximum lbs. a.i./A per year: 18.0</li> </ul> </li> </ul>
Lupine, Lentil	Anthracnose (Colletotrichum gloeosporioides) Ascochyta blight (Ascochyta pisi)	1 - 1.5	Start applications when disease threatens and repeat at 7- to 10-day intervals to maintain control. Use in sufficient water to obtain adequate coverage. Restrictions: • Apply by air or ground. • PHI: 14 days • Maximum lbs. a.i./A per year: 6.0
Mint	Rust ( <i>Puccinia menthae</i> ) Septoria leaf spot ( <i>Septoria menthae</i> )	1.38	<ul> <li>Begin applications when emerging plants are 4-8 inches high. Repeat applications at 7- to 10-day intervals or as necessary to maintain control.</li> <li>Restrictions: <ul> <li>Apply by air or ground.</li> <li>PHI: 80 days</li> <li>Maximum lbs. a.i./A per year: 3.0</li> <li>Based on available residue data, use of Chlorothalonil 720 Select is restricted to Indiana, Michigan, and Wisconsin.</li> </ul> </li> </ul>
Onion (Dry Bulb) Garlic	Botrytis leaf blight or blast ( <i>Botrytis</i> spp.) Purple blotch ( <i>Alternaria porri</i> ) Downy mildew (suppression) ( <i>Peronospora destructor</i> ) Botrytis neck rot ( <i>Botrytis alii</i> .)	1.0 - 3.0	Use <b>Chlorothalonil 720 Select</b> with disease monitoring systems that adjust fungicide rates and frequency of applications according to disease hazard. Apply as follows: • Low Disease Hazard & Prior to Infection: 1 pint
	(suppression)	1.30 - 3.0	<ul> <li>• Low Disease Hazard &amp; Prior to Infection. 1 pint every 10 days.</li> <li>• Low Disease Hazard &amp; Some Disease Present: 1.38</li> </ul>

			rage 3 01.
			<ul><li>pints every 7-10 days.</li><li>High Disease Hazard: 3 pints every 7 days.</li></ul>
			For suppression of neck rot ( <i>Botrytis</i> spp.) during storage, make a minimum of three weekly applications prior to lifting.
			<ul> <li>Restrictions:</li> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 7 days</li> <li>Maximum lbs. a.i./A per year: 15.0</li> </ul>
Onion (Green Bunching) Leek Shallot Onion & Garlic Grown for Seed	Botrytis leaf blight or blast ( <i>Botrytis</i> spp.) Purple blotch ( <i>Alternaria porri</i> ) Downy mildew (suppression) ( <i>Peronospora destructor</i> )	1.5 - 3.0	Begin applications prior to favorable infection periods, and repeat at 7- to 10-day intervals for as long as conditions favor disease. Use the higher rate within the specified rate range and a 7-day schedule of applications when heavy dew or rain persists. If additional disease control is needed before harvest, use another registered fungicide.
			<ul> <li>Restrictions:</li> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 7 days (garlic); 14 days (green onion, leek, shallot)</li> <li>Maximum lbs. a.i./A per year: 6.7</li> </ul>
Parsnip	Alternaria leaf spot ( <i>Alternaria</i> spp.) Downy mildew ( <i>Plasmopara crustosa</i> ) Anthracnose ( <i>Colletotrichum</i> spp.) Gray mold ( <i>Botrytis cinerea</i> ) Bottom rot ( <i>Rhizoctonia solani</i> )	1.5 - 2.0	<ul> <li>Make the first application at the first sign of disease or when conditions are favorable for infection. Continue applications on a 7- to 10-day schedule.</li> <li>Restrictions: <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 10 days</li> </ul> </li> </ul>
Peanut	Early leaf spot ( <i>Cercospora</i> <i>arachidicola</i> ) Late leaf spot ( <i>Cercosporidium</i> personatum) Pepper spot ( <i>Leptosphaerulina</i>	1.0 - 1.5	<ul> <li>Maximum Ibs. a.i./A per year: 6.0</li> <li>Apply in sufficient water for coverage when leaf wetness first occurs or 30 to 40 days after planting; repeat at 14-day intervals.</li> <li>Restrictions:</li> </ul>
	crassiasca) Rust (Puccinia arachidis) Web blotch (Phoma arachidicola)	1.5	<ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 14 days</li> <li>Maximum lbs. a.i./A per year: 9.0</li> <li>DO NOT allow livestock to graze in treated areas.</li> <li>DO NOT feed hay or threshings from treated fields to livestock.</li> </ul>
Potato	Late blight ( <i>Phytophthora infestans</i> ) Early blight ( <i>Alternaria solani</i> ) Botrytis vine rot ( <i>Botrytis cinerea</i> ) Black dot ( <i>Colletotrichum coccodes</i> )	0.75 -Then- 1.0 - 1.5	<ul> <li>Begin applications at the lower rate within the specified rate range when vines are first exposed and leaf wetness occurs. Repeat applications at 5- to 10-day intervals. Begin applying the higher label rates within the specified rate range at 5- to 10-day intervals when any of the following events occur: <ol> <li>Vines close within the rows;</li> <li>Late blight forecasting measures 18 disease severity values (DSV);</li> <li>The crop reaches 300 P-days.</li> </ol> </li> </ul>
			Increase water spray volume as canopy density increases. Use the highest rate within the specified rate range and the shortest interval when plants are rapidly growing and disease conditions are severe.
			<ul> <li>Restrictions:</li> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 7 days</li> <li>Maximum lbs. a.i./A per year: 11.25</li> </ul>
Rhubarb	Ramularia leaf spot ( <i>Ramularia rhei</i> ) Ascochyta blight ( <i>Ascochyta rhei</i> )	3.0	Start applications when disease threatens and repeat at 7- to 10-day intervals to maintain control. Use in sufficient water to obtain adequate coverage.

		1	Page 10 of
			Restrictions: • Apply by air or ground. • PHI: 30 days • Maximum Ibs. a.i./A per year: 13.5
Soybean	Anthracnose (Colletotrichum truncatum) Diaporthe pod & stem blight (Diaporthe phaseolorum) Frogeye leaf spot (Cercospora sojina) Purple seed stain (Cercospora kikuchii) Cercospora leaf blight (Cercospora kikuchii) Septoria brown spot (Septoria glycines)	1.0 - 2.0	<ul> <li>Use the three application program in areas having history of moderate to severe disease intensity.</li> <li>2 Application Program:</li> <li>Determinate southern varieties: Early pod se (R3), Seed formation (R5)</li> <li>Indeterminate northern varieties: Pods 1-12 then 14 days later.</li> <li>3 Application Program:</li> <li>Determinate southern varieties: Early flowering (R1), Early pod set (R3), Seed formation (R5)</li> <li>Indeterminate northern varieties: Cone week af first flowering then at 14-day intervals.</li> </ul>
	Rust (Phakopsora pachyrhizi) Stem canker (Diaporthe phaseolorum var. caulivora)	1.0	<ul> <li>Rust and Stem canker: Apply in 10-20 gallons of water per acre, as a band treatment directing spray to provide coverage of entire plant. Make the application at time of emergence of the second trifoliate leaves (V2). If conditions favor stem canker disease, make a second and third application at 14-day intervals.</li> <li><b>Restrictions:</b> <ul> <li>Apply by air, ground, or chemigation.</li> <li>PHI: 42 days</li> <li>Maximum lbs. a.i./A per year: 4.5</li> <li>DO NOT feed soybean hay or threshings from treated fields to livestock.</li> </ul> </li> </ul>
Tomato	Foliage (apply every 7-10 days):Early blight (Alternaria solani)Late blight (Phytophthora infestans)Gray leaf spot (Stemphylium botryosum)Gray leaf mold (Fulvia fulva; Cladosporium)Septoria leaf spot (Septoria lycopersici)Target spot (Corynespora cassiicola)	1.38 - 2	Begin applications when dew or rain occurs and disease threatens. Use the highest rate within the specified rate range and shortest interval specified when disease conditions are severe. <b>Chlorothalonil 720 Select</b> may be combined in the spray tank with EPA-registered pesticide products that claim copper as the active ingredient and are labeled for control of bacterial diseases of tomatoes. Check the copper manufacturer's label for specific
	Fruit (apply every 7-14 days, beginning at fruit set): Anthracnose ( <i>Colletotrichum</i> spp.) Alternaria fruit rot (black mold) ( <i>Alternaria alternata</i> ) Botrytis gray mold ( <i>Botrytis cinerea</i> ) Late blight fruit rot ( <i>Phytophthora</i> <i>infestans</i> ) Rhizoctonia fruit rot ( <i>Rhizoctonia</i> <i>solani</i> )	2 - 3	<ul> <li>instructions, precautions, and limitations prior to mixing with Chlorothalonil 720 Select.</li> <li>Restrictions: <ul> <li>Apply by air or ground. Chemigation permitted with solid set or portable wheel move systems only.</li> <li>PHI: 0 days</li> <li>Maximum lbs. a.i./A per year: 15.1</li> </ul> </li> </ul>
Yam	Anthracnose (Colletotrichum gloeosporioides)	1.0 - 1.25	Start applications when disease threatens and repeat at 10- to 14-day intervals to maintain control. Use in sufficient water to obtain adequate coverage. Restrictions: • Apply by air, ground, or chemigation. • PHI: 7 days • Maximum lbs. a.i./A per year: 11.25

## Tree, Bushberry and Orchard Crops

Apply **Chlorothalonil 720 Select** in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not feasible, **Chlorothalonil 720 Select** may be applied with aircraft using at

least 20 gallons of spray per acre. When concentrate sprays are used or when treating non-bearing or immature trees, use the lower rate of **Chlorothalonil 720 Select** within the specified rate range for the crop being treated.

DO NOT allow livestock to graze in treated areas.

DO NOT apply C	Chlorothalonil 720 Select within	one week be	efore or after appl	lication of oil or an oil-based pesticide.
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DO NOT apply	Chlorothalonil 720 Select within			lication of oil or an oil-based pesticide.
Сгор	Diseases	Rate Pints Per Acre	Spray Volume (Gallons Per Acre)	Application Instructions
Almonds	Shothole (Wilsonomyces carpophilus) Scab (Venturia carpophila) Anthracnose (Colletotrichum acutatum) Brown rot blossom Twig blight (Monilinia spp.)	3.0	20 (concentrate) to 300 (full dilute)	For best control of shothole apply at leaf fall in late autumn. Apply also at budbreak to protect newly emerging leaves and at shuck (jacket) split to prevent nut infections and to control scab and anthracnose. <b>Dormant applications for scab:</b> Apply before bud swell (generally December 1 <sup>st</sup> through January 10 <sup>th</sup> ). Apply 4 pints <b>Chlorothalonil 720 Select</b> with 4 gals. of agricultural spray oil per acre. For blossom and twig blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather conditions favor disease development, make an additional application at petal fall. <b>Restrictions:</b>
Blueberry	Suppression:	3.0 - 4.0	20 (concentrate)	<ul> <li>Apply by air or ground.</li> <li>PHI: 150 days</li> <li>Maximum lbs. a.i./A per year: 18.75</li> <li>Begin applications at budbreak (green tip). Repeat</li> </ul>
	Mummy berry (Monilinia vaccinii-corymbosi) Anthracnose (Colletotrichum gloeosporioides) Rust (Pucciniastrum vaccinii) Septoria leaf spot (Septoria albopunctata)		to 100 (full dilute)	applications at backsteak (green tip), hepede applications until early bloom at 10-day intervals. For post-harvest foliar applications, apply in sufficient water (20 - 100 gallons) to obtain adequate coverage in order to maintain healthy leaves for the following season. Repeat at 10- to 14-day intervals. A minimum re-treatment interval is 10 days. <b>Restrictions:</b> • Apply by air or ground.
				<ul> <li>PHI: 42 days</li> <li>Maximum lbs. a.i./A per year: 9.0</li> <li>DO NOT apply after early bloom, otherwise phytotoxicity may occur to the developing fruit.</li> </ul>
Cranberry	Upright dieback (Phomopsis vaccinii syn. Diaporthe vaccinii) Fruit rot (Monilinia oxycocci) Fruit rot disease complex leaf & twig blight (Lophodermium spp.)	4.0 - 7.0	20 (concentrate) to 300 (full dilute)	<ul> <li>repeat at 10- to 14-day intervals. Under severe disease pressure use the higher rate within the specified rate range on a 10-day schedule.</li> <li><b>Restrictions:</b> <ul> <li>Apply by air or ground. Chemigation is allowed for solid set systems only.</li> <li>PHI: 50 days</li> <li>Maximum lbs. a.i./A per year: 15.0</li> <li>DO NOT apply to bogs when flooded or allow release of irrigation water from bogs for at least 3 days following application.</li> </ul> </li> </ul>
Filberts (Hazelnut)	Eastern filbert blight (Anisogramma anomala)	4.0	20 (concentrate) to 300 (full dilute)	Begin applications at leaf bud break and repeat at 2- to 4-week intervals. Restrictions: • Apply by air or ground. • PHI: 120 days

				<ul> <li>Maximum Ibs. a.i./A per year: 9.0</li> <li>Based on available residue data, use of Chlorothalonil 720 Select on filberts is restricted to Oregon.</li> <li>DO NOT apply through irrigation.</li> <li>DO NOT apply with oils, other pesticides, surfactants or fertilizers.</li> <li>DO NOT apply within one week of an oil-based pesticide application.</li> </ul>
Mango	Anthracnose ( <i>Colletotrichum</i> spp.)	2.0 - 3.5	20 (concentrate) to 300 (full dilute)	Begin applications at early bloom and repeat at 7- to 14-day intervals until early fruit development. Begin the season with the lower rate on a 14-day interval (the minimum re-treatment interval is 7 days).Use the higher rate within the specified rate range and apply weekly when conditions favor disease. Use during bloom and fruit set up until fruit reach one-inch diameter. May cause spotting on fruit larger than one inch in diameter. <b>Restrictions:</b>
				<ul> <li>Apply by air or ground.</li> <li>PHI: 21 days</li> <li>Maximum lbs. a.i./A per year: 24.0</li> </ul>
Рарауа	Alternaria fruit spot (Alternaria alternate)	2.0 - 3.0	20 (concentrate) to	Apply with ground equipment only. Begin treatment when conditions favor development of
	Anthracnose ( <i>Colletotrichum</i> spp.) Stem end rot ( <i>Alternaria</i> <i>alternate, Colletotrichum</i>		150 (full dilute)	disease and continue treatments at 14-day intervals until weather conditions no longer favor disease development.
	spp.)			Restrictions: • Apply by air or ground. • PHI: 0 days • Maximum lbs. a.i./A per year: 6.75
Passion Fruit	Alternaria fruit and leaf spot (brown spot) (Alternaria spp.) Anthracnose (Colletotrichum spp.) Cercospora fruit spot (Cercospora spp.)	2.0	20 (concentrate) to 100 (full dilute)	Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications before fruit spots appear (April to July) and re-apply at 14-day intervals until weather conditions no longer favor disease development.
				Restrictions: • Apply by air or ground. • PHI: 7 days • Maximum lbs. a.i./A per year: 7.5
Persimmon (Florida & Hawaii only)	Cercospora leaf spot (Cercospora fuliginosa)	1.25	20 (concentrate) to 100 (full dilute)	
				Restrictions: • Apply by air or ground. • PHI: 14 days • Maximum Ibs. a.i./A per year: 4.7
Pistachio	<ul> <li>Shoot &amp; Panicle blight (Botryosphaeria dothidea; conidial stage; Fusicoccum spp.)</li> <li>Blossom &amp; Shoot blight (Botrytis cinerea)</li> <li>Septoria leaf spot (Septoria pistacina)</li> <li>Suppression:</li> <li>Leaf blight &amp; Late blight (Alternaria spp. &amp; Stemphylium spp.)</li> </ul>	6.0	20 (concentrate) to 200 (full dilute)	Apply when trees begin to blossom then re-apply at full bloom for optimal protection against shoot and panicle blights. If conditions are favorable for late blight or leaf spot infections, repeat applications at 4-week intervals. Use the higher rate within the specified rate range when abnormally wet or cloudy weather conditions prevail. <b>Note:</b> Use of <b>Chlorothalonil 720 Select</b> in the manner described may result in specking or reddening of the fruit hull (epicarp). This effect appears to the superficial and has not resulted in any change in nut quality.

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Stone Fruit:	Leaf curl <i>(Taphrina</i>	3.125 -	20 (concentrate)	Restrictions: • Apply by air or ground. • PHI: 14 days • Maximum lbs. a.i./A per year: 22.5 For best control apply at leaf fall in late autumn,
Apricot Cherry Nectarine Peach Plum Prune	deformans)	4.125	to 300 (full dilute)	using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels use the high rate within the specified rate range and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of <b>Chlorothalonil 720 Select</b> for control of leaf curl may be made at any time prior to budswell the following spring.
	Shothole ( <i>Wilsonomyces</i> <i>carpophilus</i> ) Brown rot blossom blight ( <i>Monilinia</i> spp.) Lace (russet) scab on prune Cherry leaf spot ( <i>Blumeriella</i> <i>jaapii</i> ) Scab ( <i>Cladosporium</i> ) Black knot (cherry, plum) ( <i>Apiosporina morbosa</i> )			Make one application at budbreak or popcorn (pink, red or early white bud). If weather conditions favor disease, make a second application 10 days later (full bloom to petal fall). Apply at shuck split to prevent infections on young fruit. If additional disease control is needed after shuck split and before harvest, use another registered fungicide. For control of cherry leaf spot after harvest, make one application to foliage within 7 days after fruit is removed. In orchards with a history of high leaf spot incidence, make a second application 10-14 days later.
				<ul> <li>Restrictions:</li> <li>Apply by air or ground.</li> <li>PHI: DO NOT apply after shuck split.</li> <li>Maximum lbs. a.i./A per year: 15.4</li> </ul>
Conifers (pines and spruces)	Swiss Needlecast (Phaeocryptopus gaeumannii)	2.75 - 5.5	5 - 10 (concentrate ground or aircraft) to	<b>Single application technique:</b> In Christmas tree plantations make one application in the spring when new shoot growth is ½ - 2".
	Scleroderris canker (pines) (Gremmeniella abietina) Swiss Needlecast (Phaeocryptopus gaeumannii)	1.5 - 2.75	100 (dilute)	Make the first application in spring when new shoot growth is ½ - 2". Make additional application at 3- to 4-week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate within the specified rate range on a 3-week schedule.
	Sirococcus tip blight (Sirococcus conigenus)	2.0 - 3.5		
	Rhizosphaera Needlecast (spruces) ( <i>Rhizosphera</i> spp.) Scirrhia brown spot (pines) ( <i>Mycosphaerella dearnessii</i> )	5.5		
	Cyclaneusma and Lophodermium Needlecast (pines)	2.75 - 5.5		Apply in early spring prior to budbreak. Repeat applications at approximately 6- to 8-week intervals, until spore release ceases in late fall. Apply monthly during periods of frequent rainfall, and where Lophodermium infections occur during dormancy (Pacific Northwest). During drought periods, applications may be suspended, then resumed upon next occurrences of needle wetness.
	Rhabdocline Needlecast (Douglas fir)	1.5 - 2.75		Apply at budbreak and repeat at 3- to 4-week intervals until needles are fully elongated and conditions no longer favor disease development. In plantations of mixed provenance, or when

		irregular budbreak occurs, apply weekly until all trees have broken bud, then every 3-4 weeks as specified above. In nursery beds, use the high rate on a 3-week schedule.
Botrytis seedling blight ( <i>Botrytis</i> spp.) Phoma twig blight ( <i>Phoma</i> spp.)	2.75	Begin applications in nursery beds when seedlings are 4 inches tall and when cool, moist conditions favor disease development. Make additional applications at 7- to 14-day intervals as long as favorable disease conditions exist.
Autoecious needle rust (Weir's cushion) (spruces) (Chrysomyxa weirii)	5.5	<ul> <li>Begin applications when 10% of buds have broken and repeat twice thereafter at 7 - 10 day intervals.</li> <li>Restrictions: <ul> <li>Apply by air or ground.</li> <li>Maximum lbs. a.i./A per year: 16.5</li> <li>Apply to conifers in: conifer nursery beds, Christmas tree and bough plantations, tree seed orchards, and landscape situations.</li> <li>DO NOT use on forests.</li> </ul> </li> </ul>

### Turfgrasses

Do not use on home lawns and turf sites associated with apartment buildings, daycare centers, playgrounds, recreational park athletic fields, athletic fields located on or next to schools (i.e., elementary, middle, and high schools), campgrounds, churches, and theme parks. Sod farm turf treated with chlorothalonil prior to harvest must be mechanically cut rolled and harvested. Do not use for sod farms at application rates greater than 13 pounds of active ingredient per acre per year. Do not apply more than the following totals of chlorothalonil active ingredient from all registered product sources to the indicated types of turfgrass:

Type of Turfgrass	Total Chlorothalonil Active Ingredient per Acre per Year	
Golf Course Greens	73 lbs.	
Golf Course Tees	52 lbs.	
Golf Course Fairways	26 lbs.	
Sod Farms	13 lbs.	
Other Turf (not Sod farms)	26 lbs.	

Apply **Chlorothalonil 720 Select** in 90 to 450 gallons of water per acre on golf course greens and tees, and 30 to 100 gallons of water per acre on fairways, lawns and other turfgrass. Apply with ground equipment only.

Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below. DO NOT mow or irrigate after treatment until spray deposit on turfgrass is thoroughly dry. This product should always be used in conjunction with good turf management practices.

Diseases* Controlled	Interval of Application	Golf Course Greens & Tees (Rate/1,000 Sq. Ft.)	Golf Course Fairways, Lawns & Other Turfgrass** Rate per Acre
1. Dollar spot	7 - 14 days	2 to 3.6 fl. oz.	5.5 to 9.75 pints
2. Brown patch		(4.1 to 7.3 fl. oz. a.i./A)	(4.1 to 7.3 lbs. a.i./A)
3. Leaf spot, Melting Out, Brown blight			
4. Gray leaf spot			
5. Red thread	7 days	3.6 fl. oz.	9.75 pints
6. Anthracnose	or	Or	Or
7. Copper spot	14 days	5.5 fl. oz.	15 pints
8. Stem rust (bluegrass)		(7.3 or 11.3 fl. oz. a.i./A)	(7.3 or 11.3 lbs. a.i./A)
9. Dichondra leaf spot			

\*Diseases listed are caused by fungi, some of which are named below:

1. Dollar spot: Sclerotinia homoeocarpa; Lanzia or Moellerodiscus spp.

2. Brown patch: Rhizoctonia solani, R. zeae, R. cerealis

3. Leaf spots, Melting Out, Brown blight: Drechslera spp. (including D. poae, D. siccans), Bipolaris sorokiniana, Curvularia spp.

4. Gray leaf spot: *Pyricularia grisea, P. oryzae* 

5. Red thread: *Laetisaria fuciformis* 

6. Anthracnose: Colletotrichum graminicola

7. Copper spot: Gloeocercospora sorghi

8. Stem rust: Puccinia graminis

9. Dichondra leaf spot: *Alternaria* spp.

\*\*Does not include sod farms.

**Gray Snow Mold** caused by *Typhula* spp.: Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1,000 square feet). Apply 5.5 fluid ounces of **Chlorothalonil 720 Select** per 1,000 square feet of turf area (15 pints per acre). Application must be made before snow cover in autumn. If snow cover is intermittent or lacking during the winter, re-apply this product at monthly intervals until Gray Snow Mold conditions no longer prevail. In areas where Pink Snow Mold (Microdochium or Fusarium patch) is likely to occur, apply **Chlorothalonil 720 Select** at 5.5 fluid ounces in combination with products containing iprodione at 2 ounces active ingredient per 1,000 square feet of turf area. Read and observe all label directions for products containing these active ingredients.

**Fusarium (Microdochium) Patch: Chlorothalonil 720 Select** is effective against Fusarium Patch only in areas where snow cover is intermittent or lacking during the winter. Apply 5.5 fluid ounces of **Chlorothalonil 720 Select** per 1,000 square feet of turf area. Begin applications in late autumn and re-apply at 21- to 28-day intervals until conditions favorable for Fusarium patch no longer prevail.

**Algal Scum:** Apply **Chlorothalonil 720 Select** at 2 to 3.6 fluid ounces per 1,000 square feet on a 7- to 14-day schedule. When colonies of algae are well established, every attempt should be made to dry out the afflicted area. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with the use of this product. Several applications of this product at the high rate may be necessary for turfgrass recovery. When environmental conditions are favorable for algae growth, a preventative program with this product will suppress re-colonization of the turf.

#### **Ornamental Plants**

Apply **Chlorothalonil 720 Select** at a rate of 1<sup>\*</sup>/<sub>4</sub> pints pounds per 100 gallons of water unless other directions are given in the tables below. Apply enough diluted spray per acre to provide thorough coverage of all plant parts that are intended to be protected from disease, generally ranging from 20 to 150 gallons per acre. Repeat applications at 7- to 14-day intervals until conditions are no longer favorable for disease. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply this product at 7-day intervals. **DO NOT apply more than a total of 36.4 lbs. chlorothalonil active ingredient per acre per year on field-grown ornamentals.** 

Fruits and other structures which may be borne on treated plants **MUST NOT BE EATEN.** 

This product may be used in greenhouses. DO NOT use mist blowers or high pressure spray equipment when making applications of this product in greenhouses.

**Chlorothalonil 720 Select** is recommended for control of fungal diseases referred to by numbers in parentheses following each type of ornamental plant. The user should test for possible phytotoxic responses, using recommended rates on each type of ornamental plant on a small area prior to widespread use. Applications made during bloom may damage flowers and/or fruits.

#### Ornamentals Recommended for Treatment with Chlorothalonil 720 Select

Broadleaf Shrubs and Trees	
Andromeda (Pieris) (4)	Holly (1)
Ash (Fraxinus) (1)	Lilac (5)
Aspen (1)	Magnolia (1)
Azalea (1,2,4)	Maple (1)
Buckeye, Horse chestnut (1)	Mountain laurel (1)
Camellia (2)	Oak (red group only) (1,7)
Cherry-laurel (1)	Oregon-grape ( <i>Mahonia</i> ) (6)
Crabapple (1,6)	Red-tip ( <i>Photinia</i> ) (1)
Dogwood (1)	Poplar (1)
Eucalyptus (3)	Privet (Ligustrum) (1)
Euonymus (1)	Rhododendron (1,2,4)
Firethorn (Pyracantha) (1)	Sand cherry (1,2)
Flowering almond (1,2)	Sequoia (1)
Flowering cherry (1,2)	Spirea (1)
Flowering peach (1,2)	Sycamore, Planetree (1)
Flowering plum (1,2)	Viburnum (5)
Flowering quince (1,2)	Walnut ( <i>Juglans</i> ) (1)
Hawthorn (1,6)	

Flowering <sup>a</sup> Plants and Bulbs	
Arabian violet (2)	Lily (1)
Begonia (1)	Marigold (1)
Carnation (1,2)	Narcissus (1)
Chrysanthemum (1,2)	Pansy (1)
Crocus (1)	Petunia (1,4)
Daffodil (1)	Phlox (1)

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Daisy (1)	Poinsettia <sup>o</sup> (1)
Geranium (1,6)	Rose <sup>c</sup> (1)
Gladiolus (1,2)	Statice (1)
Hollyhock (6)	Tulip (1)
Hydrangea (foliage only) (1,6)	Zinnia (1,5)
Iris (1.2)	

a/ Avoid applications during bloom period on plants where flower injury is unacceptable.

b/ Discontinue applications prior to bract formation; phytotoxicity is possible on the bracts.

c/ Use 1 pint of **Chlorothalonil 720 Select** per 100 gallons of water.

Foliage Plants		
Aglaonema (1)	Lipstick plant (1)	
Areca palm (1)	Ming aralia (1)	
Artemesia (1)	Oyster plant ( <i>Rhoeo</i> ) (1)	
Boston fern (Nephrolepis) (1)	Pachysandra <sup>d</sup> (1)	
Dracaena (1)	Parlor palm (Chamaedorea) (1)	
Dumbcane ( <i>Dieffenbachia</i> ) (1)	Peperomia (1)	
Fatsia (Aralia) (1)	Philodendron (1,4)	
Ficus (1)	Prayer plant ( <i>Maranta</i> ) (1)	
Florida ruffle fern (1)	Syngonium (1)	
Leatherleaf fern (1)	Zebra plant (Aphelandra) (1)	

d/ Use 2.75 pints of Chlorothalonil 720 Select per 100 gallons of water.

#### Leaf Spots & Foliar Blights controlled with Chlorothalonil 720 Select

Lear spots a ronar bights controlled with emotorialorin 720 select			
Actinopelte leaf spot	Fusarium (Gibberella) leaf spot		
Alternaria leaf spot or leaf blight	Gloeosporium black leaf spot		
Anthracnose (Gnomonia, Glomerella, Colletotrichum, Discula)	Marssonina leaf spot		
blights	Monilinia blossom blight, twig blight		
Black spot (Diplocarpon)	Mycosphaerella ray blight		
Botrytis blights	Myrothecium leaf spot, brown rot		
Cephalosporium leaf spot	Phyllosticta leaf spot		
Cercospora leaf spot	Ramularia leaf spot		
Cercosporidium leaf spot	Rhizoctonia web blight		
Shothole ( <i>Stigmina</i> )	Scab (Venturia)		
Corynespora stem & leaf spots	Septoria leaf spot		
Curvularia leaf spot	Sphaeropsis leaf spot		
Dactylaria leaf spot	Stagonospora leaf scorch		
Didymellina leaf spot	Tan leaf spot (Curvularia)		
Drechslera (Bipolaris) leaf spots, ink spot	Volutella leaf blight		
Fabraea (Entomosporium) leaf spot			

### Flower Spots & Blights controlled with Chlorothalonil 720 Select

Botrytis flower spot, flower blight	Ovulinia flower blight
Curvularia flower spot	Rhizopus blossom blight
Monilinia blossom blight	Sclerotinia flower blight

### Chlorothalonil 720 Select controls:

-Cylindrocladium stem canker

-Phytophthora leaf blight, dieback

-Erysiphe cichoracearum (powdery mildew) Microsphaera spp.

-Sphaerotheca fuliginea (powdery mildew) Microsphaera spp.

-Gymnosporangium spp. (rust) Puccinia spp.

-Pucciniastrum hydrangeae (rust) Puccinia spp.

-Taphrina blister

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

**PESTICIDE STORAGE:** Store in a cool place. Protect from excessive heat.

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

# **CONTAINER HANDLING:**

Nonrefillable Container: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### IMPORTANT INFORMATION - READ BEFORE USING PRODUCT CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Prime Source, LLC or Seller. To the extent consistent with State law all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Prime Source, LLC and Seller harmless for any claims relating to such factors.

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