

U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505T)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

| 89168-120 | |
|-----------|--|
|-----------|--|

EPA Reg. Number:

Date of Issuance:

8-120 8/31/22

NOTICE OF PESTICIDE:

X Registration
Reregistration
(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

LIBERTY CHLOROTHALONIL

Name and Address of Registrant (include ZIP Code):

Liberty Crop Protection, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/registration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Continues page 2

| | continues page 2 |
|---|------------------|
| Signature of Approving Official: | Date: |
| Gusty Crews | 8/31/22 |
| Kristy Crews, Ph.D., Product Manager 22 | |
| Fungicide Branch, Registration Division (7505P) | |

EPA Form 8570-6

- 2. You are required to comply with the data requirements described in the generic data call-in (GDCI) identified below:
 - a. Chlorothalonil GDCI-081901-1301

You must comply with all of the data requirements within the established deadlines. If you have questions about the GDCI listed above, you may contact the Chemical Review Manager in the Pesticide Re-Evaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

- 3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, "EPA Reg. No. 89168-120."
- 4. Submit one copy of the final printed label for the record before you release the product for shipment.

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 FIFRA 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) lists 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 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.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

The record for this product currently contains the following CSF(s):

- Basic CSF dated 02/22/2022
- Alternate CSF 1 dated 02/22/2022
- Alternate CSF 2 dated 02/22/2022

If you have any questions, please contact James Orrock by phone at 202-566-2862 or by email at orrock.james@epa.gov.

Enclosure

[Note to reviewer: [Text] in brackets denotes optional or explanatory language [Note to reviewer: {Text} in braces denotes where in the final label text will appear

{BOOKLET FRONT PANEL LANGUAGE}

CHLOROTHALONIL GROUP M5 FUNGICIDE

LIBERTY CHLOROTHALONIL^[™]

| ACTIVE INGREDIENT: | (% by weight) |
|---|---------------|
| Chlorothalonil (tetrachloroisophthalonitrile) | 54.0% |
| OTHER INGREDIENTS: | <u>46.0%</u> |
| TOTAL | 100.0% |
| LIBERTY CHLOROTHALONIL is formulated as a suspension concentrate (S | SC). |
| Contains 6.0 nounds Chlorothalonil per gallon | |

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.)

See inside label booklet for First Aid, Precautionary Statements and Directions for Use.

| EPA Reg. No.: 89 | 168-XX |
|------------------|--------|
| EPA Est. No.: | |
| Net Contents: | Gal |

Manufactured For:

LIBERTY CROP PROTECTION, LLC 1880 FALL RIVER DRIVE, SUITE 100 LOVELAND, CO 80538

060722

ACCEPTED

08/31/2022

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 20400 400

89168-120

{LANGUAGE INSIDE BOOKLET}

| FIRST AID | | | | |
|-------------------------|--|--|--|--|
| If on skin or clothing: | Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. | | | |
| If inhaled: | Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. | | | |
| If in eyes: | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. | | | |
| 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 the poison control center or doctor. DO NOT give anything by mouth to an unconscious person. | | | |

NOTE TO PHYSICIAN

Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted).

For Chemical Emergency: Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night

Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

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 any waterproof material to include Barrier Laminate; Butyl Rubber ≥ 14 mil; Nitrile Rubber ≥ 14 mils; Neoprene Rubber ≥ 14 mils; Polyvinyl chloride ≥ 14 mils, or Viton ≥ 14 mils.
- shoes plus socks

User Safety Requirements

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.

If the mixer/loader/applicator uses a high-pressure hand-wand sprayer, wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any R or P filter; OR, a NIOSH approved elastomeric particulate respirator with any R or P filter; OR, a NIOSH-approved powered air-purifying respirator with a HE filter.

Engineering Controls

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 PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. DO NOT contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory

Chlorothalonil is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This chemical can contaminate surface water through spray drift. 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 groundwater, areas with infield 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.

Attention: This product contains a chemical known to the State of California to cause cancer.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

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 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 (WPS), 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, 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 workers to enter treated areas during the restricted-entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical resistant gloves made of any waterproof material, shoes plus socks, protective eyewear.

Special Eye Irritation Provisions: Chlorothalonil in this product is a severe eye irritant. Although the restricted-entry interval expires after 12 hours, for the next 6.5 days entry is permitted only when the following safety measures are provided:

- 1. 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.
- 2. Workers must be informed, in a manner they can understand:
 - that residues in the treated area may be highly irritating to their eyes
 - that they should 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 should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water
 - how to operate the eyeflush container

PRODUCT INFORMATION

Application: LIBERTY CHLOROTHALONIL can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control.

Resistance Management

For resistance management, **LIBERTY CHLOROTHALONIL** contains a Group M5 fungicide. Any fungal population may contain individuals naturally resistant to **LIBERTY CHLOROTHALONIL** and other Group M5 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of **LIBERTY CHLOROTHALONIL** or other Group M5 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical
 information related to pesticide use, and crop rotation, and which considers host plant resistance, impact
 of environmental conditions on disease development, disease thresholds, as well as cultural, biological and
 other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistancemanagement and/or IPM recommendations for specific crops and pathogens.

For further information or to report suspected resistance contact your pesticide distributor or university extension specialist to report resistance.

USE RESTRICTIONS

DO NOT use on greenhouse-grown crops.

DO NOT combine **LIBERTY CHLOROTHALONIL** in spray tank with pesticides, adjuvants, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. DO NOT combine **LIBERTY CHLOROTHALONIL** with *Bacillus thuringiensis*-containing products as phytotoxicity may result from the combination when applied to the crops on this label.

DO NOT apply this product within 150 feet for aerial applications, or 25 feet for ground applications of marine/estuarine water bodies, unless there is an untreated buffer area of that width between the area to be treated and the water body.

Spray Drift Precautions

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related 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 conifer applications, public health uses or applications using dry formulations.

- 1. The distance of the outer most nozzles on the boom must not exceed ¾ 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 should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information**.

Aerial Drift Reduction Advisory Information

[This section is advisory in nature and does not supersede the mandatory label requirements.]

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift 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 conditions (See **Wind, Temperature**).

Controlling Droplet Size

- **Volume** Use high flow rate nozzles to apply the highest practical 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 the 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 type 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 potential.

Boom Length

For some use patterns, reducing the effective boom length to less than ¾ 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 ft above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications 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 upwind 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. IMPORTANT: 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 smoke 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.

Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

APPLICATION

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

Note: Slowly invert container several times to assure uniform mixture.

The required amount of **LIBERTY CHLOROTHALONIL** should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of **LIBERTY CHLOROTHALONIL** in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations.

Apply **LIBERTY CHLOROTHALONIL** in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth.

For field and row crops, spray volume usually will range from 20 to 150 gallons per acre for dilute sprays and 5 to 10 gallons per acre for concentrate ground sprays and aircraft applications.

For tree and orchard crops, apply **LIBERTY CHLOROTHALONIL** in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

Application and Calibration Techniques for Chemigation

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 injection 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 LIBERTY CHLOROTHALONIL 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 water 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.

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.

LIBERTY CHLOROTHALONIL 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 positive displacement injection pump, of either diaphragm or piston type, constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock and capable of injection at pressures approximately 2-3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems.

Thoroughly mix recommended amount of **LIBERTY CHLOROTHALONIL** 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 **LIBERTY CHLOROTHALONIL** 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 **LIBERTY CHLOROTHALONIL** for acreage to be covered with water so that the total mixture of **LIBERTY CHLOROTHALONIL** plus water in the injection tank is equal to the quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used, for amount of time established during calibration. Agitation is recommended. **LIBERTY CHLOROTHALONIL** 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 **LIBERTY CHLOROTHALONIL** has been cleared from last sprinkler head.

DIRECTIONS FOR APPLICATION

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-----------|---|------------------------------|--|
| Asparagus | Rust (Puccinia asparagi) Purple Spot (Pleospora herbarum) Cercospora blight (C. asparagi) | 2.0 to 4.0 (1.50 to 3.00) | Use water volumes of 25 to 50 gallons per acre. Begin applications following final harvest of spears. Repeat applications at 14- to 28-day intervals, depending on disease pressure. Use the higher rate and shorter interval if disease severity begins to increase during the season or weather conditions are conducive for severe epidemics. Apply by ground. |

- DO NOT apply more than 12 pints of LIBERTY CHLOROTHALONIL (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 190 days (120 days in CA and AZ) of the harvest of spears in the following season (190-day PHI, except CA & AZ 120-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-------------|--|---------------------------|--|
| | | 1 3/8 to 3.0 | Use in sufficient water to obtain adequate coverage. |
| Bean (Snap) | Rust (Uromyces appendiculatus) | (1.03 to 2.25) | Begin applications during early bloom stage or when disease first threatens and repeat as necessary to maintain control. |
| | Botrytis blight (gray mold) (B. cinerea) | 3.0 (2.25) | Apply by ground, air or chemigation. |

- DO NOT apply more than 12 pints of **LIBERTY CHLOROTHALONIL** (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--|--|--------------------------------|--|
| Beans (Dry) (except soybeans) (Crop Subgroup 6C) bean, adzuki bean, broad bean, dry bean, lablab bean, navy bean, kidney bean, lima bean, moth bean, mung bean, pink bean, pinto bean, tepary bean, urd bean, yardlong catjang chickpea (garbanzo) cowpea lupin, grain lupin bean, rice bean, runner bean, jackbean pea, blackeyed pea, southern | Rust (Uromyces appendiculatus) Anthracnose (Colletotrichum lindemuthianum) Downy mildew (Phytophthora nicotianae) Cercospora leaf blotch (C. cruenta) Ascochtyta blight (A. phaseolorum) | 1 3/8 to 2.0 (1.03 to 1.50) | Use in sufficient water to obtain adequate coverage. Begin applications at first onset of disease, which may occur as early as 2 to 4 weeks before flowering. Repeat applications at 7- to 10- day intervals. For use only on beans to be harvested dry with pods removed. Apply by ground, air or chemigation. |

- DO NOT apply more than 8 pints of **LIBERTY CHLOROTHALONIL** (6.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 14 days before harvest (14-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-------------|--|------------------------------|---|
| Blueberries | Suppression: Anthracnose (ripe rot) (Colletotrichum gloeosporoides) Mummy berry (Monilinia vaccinii- corymbosi) | 3.0 to 4.0 (2.25 to 3.00) | LIBERTY CHLOROTHALONIL should be integrated into an overall disease management strategy which includes alternation with a fungicide with a different mode of action. Diseases may only be suppressed and russetting may occur under heavy disease pressure or unfavorable environmental conditions. Apply in sufficient water to obtain adequate coverage, normally 20 to 100 gallons per acre. Begin applications at budbreak (green tip) and repeat at 10-day intervals through early bloom. Under heavy disease pressure, use the higher rate. Apply by ground or air. |
| | Septoria leaf spot (Septoria albopunctata) Rust (Pucciniastrum vaccinii) | 3.0 to 4.0 (2.25 to 3.00) | Foliar Use After Harvest (after all berries are harvested): To maintain healthy leaves for the following season, apply in sufficient water to obtain adequate coverage (normally 20 to 100 gallons per acre). Repeat at 10- to 14-day intervals. Apply by ground or air. |

- DO NOT apply more than 12 pints of **LIBERTY CHLOROTHALONIL** (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 10 days.
- DO NOT apply after full bloom (except for foliar use after harvest) or within 42 days of harvest (42-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---|---|---------------------------|---|
| Brassica, Head and Stem (Crop Subgroup 5A) Broccoli | Alternaria leaf spot (Alternaria spp.) | 1½ (1.125) | Use in sufficient water to obtain adequate coverage. Begin applications after transplants are set in field, or shortly after emergence of field seeded crop, or when conditions favor disease development. Repeat at 7- to 10-day |
| Broccoli, Chinese Brussels Sprouts | Downy mildew (Peronospora parasitica) | | intervals to maintain control. Apply by ground, air or chemigation. |
| Cabbage Chinese (tight-headed varieties only) Cabbage, Chinese (napa) Cabbage, Chinese Mustard Cauliflower Cavalo Broccolo Kohlrabi | Ring spot (California only) (Mycosphaerella brassicicola) | 2.0 (1.50) | For field-seeded Brussels sprouts, begin applications at time of early sprout development or when conditions favor disease development. Repeat at 7- to 10-day intervals to maintain control. |

- DO NOT apply more than 11.7 pints of LIBERTY CHLOROTHALONIL (8.8 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------|------------------------|---------------------------|---|
| Carrot | | | |
| | Alternaria leaf blight | 1 ½ to 2.0 | Use in sufficient water to obtain adequate coverage. |
| | (A. dauci) | (1.125 to | Start applications when disease threatens and repeat at |
| | | 1.50) | 7- to 10-day intervals to maintain control. |
| | Cercospora leaf spot | | · |
| | (C. carotae) | | Apply by ground, air or chemigation. |

Specific Use Restrictions:

- DO NOT apply more than 20 pints of **LIBERTY CHLOROTHALONIL** (15 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- LIBERTY CHLOROTHALONIL may be applied the day of harvest (0-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------|---|---|---|
| Celery | Basal stalk rot (Rhizoctonia solani) Early blight (Cercospora apii) Late blight (Septoria apicola) Suppression (7 day schedule): Pink rot (Sclerotinia sclerotiorum) | 2.0 to 3.0 (1.50 to 2.25) 3.0 (2.25) | Use in sufficient water to obtain adequate coverage. Start applications when transplants are set in the field and repeat at a 7-day interval as needed to maintain control. Apply by ground, air or chemigation. |
| | Early blight (Cercospora apii) Late blight (Septofia apicola) | 1½ to 2.0 (1.125 to 1.50) per 100 gal | For celery seedbeds, apply in a spray volume of 125 gallons per acre twice weekly or as needed to maintain control. Start applications shortly after crop emergence. Use the higher rate under severe disease conditions. |

- DO NOT apply more than 24 pints of **LIBERTY CHLOROTHALONIL** (18 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---|--|---------------------------|---|
| Corn (sweet), Corn (grown for seed) | Leaf Blights (Helminthosporium spp.) Rust (Puccinia spp.) | ¾ to 2.0 (0.6 to 1.5) | Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development and repeat at a 7-day interval as required to maintain control. Under severe disease conditions, use 1½ to 2 pints of LIBERTY CHLOROTHALONIL per acre. Apply by ground, air or chemigation. |

- DO NOT apply more than 12 pints of LIBERTY CHLOROTHALONIL (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 14 days of harvest (14-day PHI).
- DO NOT apply to sweet corn to be processed.
- DO NOT allow livestock to graze in treated fields.
- DO NOT ensile treated corn or use as livestock forage.

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS | | |
|-----------|---|------------------------------|--|--|--|
| Cranberry | Fruit rots | 4.0 to 6 ½ (3.00 to 4.90) | Apply at early bloom and repeat at 10- to 14-day Intervals. Under severe disease conditions, use the 6½ pint per acre rate on a 10-day schedule. | | |
| | Lophodermium leaf/twig blight (<i>L. hypophyllum</i>) | | Apply by ground, air or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only. | | |
| | Upright dieback (Phomopsis vaccinii) | 4.0 to 6 ½ (3.00 to 4.90) | Apply in sufficient water to obtain coverage of uprights and runners. Make the first application before bloom, at the time shoots begin growth in the spring. Make additional applications at 10- to 14-day intervals. | | |
| | | | Apply by ground, air or chemigation. When applying by chemigation, use 300 gallons of water per acre through solid set systems only. | | |

- DO NOT apply more than 20 pints of LIBERTY CHLOROTHALONIL (15 lb ai) per acre per year.
- Minimum retreatment interval is 10 days.
- DO NOT apply within 50 days of harvest (50-day PHI).
- DO NOT apply to beds when flooded or allow release of irrigation water from beds for at least 3 days following application.

| Corp group 9)(Colletotrichum spp.)(1.125 to 1.50)Begin app stage or we developm stage or we develop stage or we d | ifficient water to obtain adequate coverage. plications when plants are in first true leaf when conditions are favorable for disease ment. Repeat applications at 7-day intervals. Iraying mature watermelons may result in of the upper surface of the fruit. DO NOT EERTY CHLOROTHALONIL to watermelons y of the following conditions are present: Intense heat and sunlight Drought conditions Poor vine canopy Other crop and environmental conditions which may be conducive to increased natural sunburn combine LIBERTY CHLOROTHALONIL with except water for application to watermelons our prior use has shown the combination to be ies to watermelons under your conditions of ground, air or chemigation. |
|---|---|

Additional cucurbit crops: Chayote, Chinese waxgourd, Gourds, Momordica spp. (Bitter melon, Balsam apple)

- DO NOT apply more than 21 pints of **LIBERTY CHLOROTHALONIL** (15.75 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- LIBERTY CHLOROTHALONIL may be applied the day of harvest (0-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|----------------|------------------------|---------------------------|--|
| Fruiting | Anthracnose | | |
| Vegetables: | (Colletotrichum spp.) | 1 ½ | Use in sufficient water to obtain adequate coverage. |
| (except | | (1.125) | Begin applications as a foliage, flower, and fruit spray |
| tomato) | Botrytis leaf mold | | when disease is expected. Repeat applications at 7- |
| Eggplant | (Botrytis cinema) | | to 10-day intervals. |
| Groundcherry | | | |
| Okra | Cercospora leaf spot | | Apply by ground, air or chemigation. |
| Pepino | (Cercospora spp.) | | |
| Pepper | | | |
| (includes bell | Powdery mildew | | |
| pepper, chili | (Leveillula taurica) | | |
| pepper, | | | |
| cooking | | | |
| pepper, | | | |
| pimento, sweet | | | |
| pepper) | | | |
| Tomatillo | | | |

- DO NOT apply more than 12 pints of LIBERTY CHLOROTHALONIL (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 3 days of harvest (3-day PHI).

| CROP DISEASES (Pathogen) | | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------------------------|---|---------------------------|---|
| Ginseng | Alternaria blight (Alternaria panax) Gray mold (Botrytis cinerea) | 2.0 (1.50) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7- to 10-day intervals as disease pressure warrants. |

- DO NOT apply more than 16 pints of **LIBERTY CHLOROTHALONIL** (12 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 14 days of harvest (14-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-------------------|--|------------------------------|--|
| Grasses | Bipolaris leaf spots | | |
| Grown for Seed | (Bipolaris spp.) Drechslera leaf spots (Drechslera spp.) Glume blotch (Phaeosphaeria nodorum, Stagonospora nodorum) Leaf rust (Puccinia spp.) Septoria leaf spot (Septoria spp.) Stem rust (Puccinia spp.) Stripe rust (Puccinia spp.) | 1.0 to 1½ (0.75 to 1.125) | Use in sufficient water to obtain adequate coverage. Begin applications during stem elongation when conditions favor disease development. Re-apply at flag (top) leaf emergence and repeat applications at 14-day intervals. Apply by ground, air or chemigation. |
| | Selenophoma eyespot | 1.0 to 2.0 (0.75 to 1.5) | |

- DO NOT apply more than 6 pints of **LIBERTY CHLOROTHALONIL** (4.5 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 14 days of harvest (14-day PHI).
- 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.

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS | |
|-------------|--|---------------------------|--|--|
| Horseradish | Ramularia stem and leaf spot (<i>Ramularia armoraciae</i>) | 3.0 (2.25) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7- to 10-day intervals as disease pressure warrants. | |

- DO NOT apply more than 24 pints of LIBERTY CHLOROTHALONIL (18 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 14 days of harvest (14-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|----------------------|---|-----------------------------|--|
| Lupine and Lentil | Anthacnose (Colletotrichum gloeosporioides) Ascochyta (Ascochyta pisi) | 1.0 to 1 ½ (0.75 to 1.1) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7- to 10-day intervals as disease pressure warrants. |

- DO NOT apply more than 8 pints of LIBERTY CHLOROTHALONIL (6.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 14 days of harvest (14-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-------|---|-----------------------------|---|
| Mango | Anthracnose (<i>Colletotrichum</i> spp.) | 2.0 to 3½ (1.50 to 2.60) | Use a water volume of 20 to 300 gallons per acre. Begin applications at early bloom and repeat on a 7- to 14-day interval until early fruit development. Begin the season with the 2-pint rate on a 14-day interval. If disease pressure is severe, use the higher rate and shorter interval. |
| | | | Use during bloom and fruit set up until fruit reach one-inch diameter. May cause spotting on fruit larger than one inch in diameter. Apply by ground or air. |

Specific Use Restrictions:

- DO NOT apply more than 32 pints of LIBERTY CHLOROTHALONIL (24 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 21 days of harvest (21-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------------|------------------------|---------------------------|--|
| Mint | Rust | 1 3/8 | Use in sufficient water to obtain adequate |
| (Indiana, | (Puccinia menthae) | (1.03) | coverage, normally 20 to 150 gallons per acre |
| Michigan and | | | for dilute sprays and 5 to 10 gallons per acre |
| Wisconsin | Septoria leaf spot | | for concentrate ground and aircraft |
| only) | (S. menthae) | | applications. Begin applications when |
| | | | emerging plants are 4 to 8 inches high. |
| | | | Repeat applications at 7- to 10-day intervals |
| | | | to maintain control. |

- DO NOT apply more than 4 pints of **LIBERTY CHLOROTHALONIL** (3.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 80 days of harvest (80-day PHI).
- DO NOT feed fresh or extracted mint hay from treated fields to livestock.

| CROP | DISEASES (Pathogen) | Fl Oz Product/1000 sq ft (lb ai/1000 sq ft) | APPLICATION DIRECTIONS |
|-----------|--|--|--|
| Mushrooms | Verticillium brown spot and dry bubble | 2 ¾ to 5 ½ fl oz (0.13 – 0.26) | Apply as a drench to the mushroom bed surface in at least 12.5 gallons of water per 1000 sq ft of mushroom bed. Make two applications as follows: • First application - apply 5 ½ fl oz of LIBERTY CHLOROTHALONIL within two days of top-dressing the spawn colonized mushroom compost with a casing layer. • Second application - apply 2 ¾ fl oz of LIBERTY CHLOROTHALONIL at pinning. |

- Make no more than two applications per cropping cycle.
- DO NOT apply more than 8.25 fl oz of **LIBERTY CHLOROTHALONIL** (0.39 lb ai) per cropping cycle.
- DO NOT apply within 5 days of first harvest (5-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS | | | | |
|-----------------------------------|---|--|--|---|---|---------------------------|--|
| Onion (Dry bulb) and Garlic | Botrytis leaf blight (Botrytis | 1.0 to 3.0 (0.75 to 2.25) | Apply in sufficient water to obtain thorough coverage of tops. LIBERTY CHLOROTHALONIL is recommended for use with disease monitoring systems which adjust fungicide rates and frequency of application according to disease hazard. Apply as follows: | | | | |
| | spp.) Purple blotch (Alternaria porri) Suppression: | | | Low Disease Hazard & Prior to Infection | Low Disease Hazard & Some Disease Present | High Disease Hazard | |
| | rot | Botrytis neck rot (Botrytis spp.) Downy mildew (Peronospora destructor) | Rate per Acre | 1pt | 1 ^{3/8} pt | 3pt | |
| | | | Frequency | 10 days | 7 to 10 days | 7 days | |
| | mildew (<i>Peronospora</i> | | For suppression of no of three weekly appli LIBERTY CHLOROTHA | ications prior to liftin |) during stong, using 1 ^{3/} | 8 to 3 pints of | |
| | | | Apply by ground, air | or chemigation. | | | |

- DO NOT apply more than 20 pints of **LIBERTY CHLOROTHALONIL** (15.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--|--|------------------------------|---|
| Onion (green bunching) Leek Shallots Onion and | Botrytis leaf blight (Botrytis spp.) Purple blotch (Alternaria porri) | 1½ to 3.0 (1.125 to 2.25) | Use in sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7-to 10-day intervals for as long as conditions favor disease. Use the high rate and a 7-day schedule of applications when heavy dew or rain persist. |
| Garlic (grown for seed) | Suppression: Downy mildew (Peronospora destructor) | | Apply by ground, air or chemigation. |

- DO NOT apply more than 9 pints of LIBERTY CHLOROTHALONIL (6.8 lb ai) per acre per year.
- DO NOT make more than 6 applications at the lowest rate (1.5 pints) or 3 applications at the highest rate (3.0 pints) of LIBERTY CHLOROTHALONIL per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 7 days of harvest on garlic and onion grown for seed (7-day PHI).
- DO NOT apply within 14 days of harvest on green bunching onions, leeks or shallots (14-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------|---|-------------------------------|---|
| Papaya | Alternaria fruit spot (A. alternata) Anthracnose (Colletotrichum spp.) Stem end rot (A. alternata, Colletotrichum spp.) | 1 ½ to 3.0 (1.125 to 2.25) | Apply with ground equipment only, in sufficient water to obtain adequate coverage of fruit and leaves. Begin treatment when conditions favor development of disease and continue treatments at 14-day intervals until weather conditions no longer favor disease development. |

Specific Use Restrictions:

- DO NOT apply more than 9 pints of LIBERTY CHLOROTHALONIL (6.75 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- LIBERTY CHLOROTHALONIL may be applied the day of harvest (0-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---------|---|-------------------------------|---|
| Parsnip | Alternaria leaf spot (Alternaria spp.) Anthracnose (Colletotrichum spp.) Botrytis bljght (gray mold) (B. cinerea) Bottom rot (Rhizoctonia) Downy mildew (Plasmopara crustosa) | 1 ½ to 2.0 (1.125 to 1.50) | Apply in sufficient water to obtain adequate coverage. 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. Apply by ground, air or chemigation. |

- DO NOT apply more than 8 pints of LIBERTY CHLOROTHALONIL (6.0 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 10 days of harvest (10-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---------------|--|---------------------------|--|
| Passion Fruit | Alternaria fruit and leaf spot (Alternaria spp.) Anthracnose (Colletotrichum spp.) Cercospora fruit spot (Cercospora spp.) | 2.0 (1.50) | Apply with ground equipment in sufficient water to obtain adequate coverage of fruit and leaves. Begin applications during late bloom and repeat at 14-day intervals until weather conditions no longer favor disease development. |

- DO NOT apply more than 10 pints of LIBERTY CHLOROTHALONIL (7.5 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------|--|------------------------------|---|
| Peanut | Early leaf spot (Cercospora arachidicola) Late leaf spot (Cercosporidium personatum) Pepper spot (Leptosphaerulina crassiasca) | 1.0 to 1½ (0.75 to 1.125) | Apply in sufficient water for coverage when leaf wetness first occurs or 30 to 40 days after planting; repeat at 14-day intervals. When conditions favor late leaf spot or when rust or web blotch, occur, apply 1.5 pints of LIBERTY CHLOROTHALONIL per acre at 14-day intervals for the remainder of the season. Apply by ground, air, or chemigation. If applying by chemigation, use 1½ pints of LIBERTY CHLOROTHALONIL per acre. It is recommended to alternate chemigation |
| | Rust (Puccinia arachidis) Web blotch (Phoma arachidicola) | 1 ½ (1.125) | applications with ground or aerial applications. |

- DO NOT apply more than 12 pints of LIBERTY CHLOROTHALONIL (9.0 lb ai) per acre per year.
- DO NOT make more than 12 applications at the lowest rate (1 pint) or 8 applications at the highest rate (1.5 pints) of LIBERTY CHLOROTHALONIL per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 14 days of harvest (14-day PHI).
- DO NOT allow livestock to graze in treated areas.
- DO NOT feed hay or threshings from treated fields to livestock.

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------|--|----------------------------|---|
| Potato | Black dot (Colletotrichum coccodes) Botrytis vine rot (B. cionerea) Early blight (Alternaria solani) Late blight (Phytophthora infestans) | 1.0 to 1 ½ (0.75 to 1.125) | Begin applications at the low rate when vines are first exposed and leaf wetness occurs. Repeat applications at 5- to 10-day intervals. Begin applying the higher label rates at 5- to 10- day intervals when any one of the following events occur: Vines close within the rows Late blight forecasting measures 18 disease severity values (DSV) The crop reaches 300 P-days Increase water spray volume as canopy density |
| | | | increases. Use the highest rate and shortest interval when plants are rapidly growing and disease conditions are severe.Apply by ground, air, or chemigation. DO NOT exceed a 10-day interval between applications when using chemigation. |

- DO NOT apply more than 15 pints of **LIBERTY CHLOROTHALONIL** (11.25 lb ai) per acre per year.
- Minimum retreatment interval is 5 days.
- DO NOT apply within 7 days of harvest (7-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---------|--|---------------------------|---|
| Rhubarb | Ramularia leaf spot (<i>Ramularia rhei</i>) | 3.0 (2.25) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 7- to 10-day intervals as disease pressure |
| | Ascochyta (Ascochyta rhei) | | warrants. |

- DO NOT apply more than 18 pints of LIBERTY CHLOROTHALONIL (13.5 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- DO NOT apply within 30 days of harvest (30-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|---------|--|------------------------------|--|
| Soybean | Anthracnose (Colletotrichum truncatum) Cercospora leaf blight (C. kikuchii) | 1 ½ to 2 ¼ (1.125 to 1.7) | Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use the three application program in areas having a history of moderate to severe disease intensity. The minimum re-treatment interval is 14 days. |
| | Diaporthe pod and stem rot (D. phaseolorum) Frogeye leaf spot | | Apply by ground, air, or chemigation. Two application program: For determinate varieties, make the first application at R3 stage (early pod set) and the second application at R5 (seed formation). For indeterminate varieties, make the first application when largest pods are 1-1½ inches in |
| | (Cercospora sojina) Purple seed stain (Cercospora kikuchii) | 1.0 to 2.0 (0.75 to 1.5) | length. Make the second application 14 days later. Three application program: For determinate varieties, make the first application at the beginning of flowering (R1), the second at early pod set (R3), and the third at beginning of seed formation (R5). For |
| | Septoria brown spot (S. glycines) Supression: Rust | | indeterminate varieties, make the first application one week after first flowering and continue applications at 14-day intervals. |
| | (Phakopsora pachyrhizi) | 1.0 | Apply in 10 to 20 gallons of water per acre, as a band |
| | Stem canker (Diaporthe phaseolorum) | 1.0 (0.75) | treatment directing spray to provide coverage of entire plant. Make the first application at time of emergence of the second trifoliate leaves (V2). If conditions favor stem canker disease make a second and third application. Make all applications at 14-day intervals. |

- DO NOT apply more than 6 pints of **LIBERTY CHLOROTHALONIL** (4.5 lb ai) per acre per year.
- DO NOT make more than 3 applications a year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 6 weeks (42 days) of harvest (42-day PHI).
- DO NOT feed hay or threshings from treated fields to livestock.

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|--------------------------|---|--------------------------------|--|
| Tomato | Early blight (Alternaria solani) Gray leaf mold (Fluvia fluva; Cladosporium) Gray leaf spot (Stemphyllium botryosum) Late blight (Phytophthora infestans) Septoria leaf spot (S. lycopersici) Target spot (Corynespora cassiicola) FRUIT Alternaria fruit rot (black mold) (A. alternate) Anthracnose (Colletotrichum spp.) Botrytis gray mold (B. cinerea) Late blight fruit rot (Phytophthora infestans) Rhizoctonia fruit rot (R. solani) | 1 3/8 to 2.0 (1.03 to 1.50) | Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Apply on a 7- to 10-day interval for foliage diseases. For fruit diseases, begin at fruit set and apply on a 7- to 14- day interval. Use the highest rate and shortest interval specified when disease conditions are severe. Apply by ground, air, or chemigation. |
| Specific Use Pestriction | | <u> </u> | |

- DO NOT apply more than 20 pints of **LIBERTY CHLOROTHALONIL** (15 lb ai) per acre per year.
- Minimum retreatment interval is 7 days.
- LIBERTY CHLOROTHALONIL may be applied the day of harvest (0-day PHI).

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|------|--|--------------------------------|--|
| Yam | Anthracnose (Colletotrichum gloeosporioides) | 1.0 to 1 ¼ (0.750 to 0.938) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 10- to 14-day intervals as disease pressure warrants. |

- DO NOT apply more than 15 pints of LIBERTY CHLOROTHALONIL (11.25 lb ai) per acre per year.
- Minimum retreatment interval is 10 days.
- DO NOT apply within 7 days of harvest. (7-day PHI)

Tree and Orchard Crops

Apply **LIBERTY CHLOROTHALONIL** in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops, the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers, the maximum volume is 100 gallons per acre.

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, **LIBERTY CHLOROTHALONIL** may be applied with aircraft using at least 20 gallons of spray per acre. The minimum volume for application by aircraft to conifer stands and Christmas trees is 10 gallons per acre.

When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of **LIBERTY CHLOROTHALONIL** listed may be used. DO NOT allow livestock to graze in treated areas.

| | DISEASES | | DUCT PER ai per) | |
|---------|--|---------------|---------------------|--|
| CROP | (Pathogen) | ACRE | 100 Gal* | APPLICATION DIRECTIONS |
| Almonds | Blossom blight/brown rot (Monilinia spp.) Scab (Venturis carpophila) Shot hole (Wilsonomyces carpophilus) Anthracnose (Colletotrichum acutatum) | 4.0 (3.00) | 1 1/3 (1.0) | Use water volumes of 20 to 300 gallons per acre. For blossom blight, begin application at popcorn (pink bud) and follow with an application at full bloom. If weather is still conducive for disease development, another application may be made at petal fall. For control of shot hole, make an application in the autumn at leaf fall. In the spring, make the first application at budbreak, followed by an application at shuck split to control nut infections and to control scab. Dormant applications for scab: Apply before bud swell (generally December 1 through January 10). Apply 4 pints LIBERTY CHLOROTHALONIL with 4 gal of agricultural spray oil per acre. For control of anthracnose, apply 4 pints/A |
| | | | | Apply by ground or air. |

- DO NOT apply more than 25 pints of LIBERTY CHLOROTHALONIL (18.75 lb ai) per acre per year (leaf fall through shuck split).
- DO NOT use exposed material as food or feed for livestock.
- DO NOT apply through irrigation.
- DO NOT apply within 150 days of harvest (150-day PHI).

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

| | Pt Product DISEASES (Ib ai/A) | | - | |
|-------------------------|--|---------------|----------------|--|
| CROP | (Pathogen) | ACRE | 100 Gal* | APPLICATION DIRECTIONS |
| Filberts (Hazelnuts) | Eastern filbert blight (Anisogramma anomala) | 4.0 (3.00) | 1 1/3 (1.0) | Use a water volume of 20 to 300 gallons per acre. Begin applications at the onset of disease or when weather conditions favor disease development. Make applications on a 14 to 28-day schedule, using the shorter interval under heavy disease pressure (the minimum re-treatment interval is 14 days). |

- DO NOT apply more than 12 pints of LIBERTY CHLOROTHALONIL (9.0 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 120 days of harvest (120-day PHI).
- DO NOT apply through irrigation.
- DO NOT apply with oils, surfactants or fertilizers.
- DO NOT apply within one week of an oil-based pesticide application.

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

| | | PT PRODUCT PER | | |
|--|---|---------------------------------|--------------------------------|--|
| | DISEASES | (Ib ai per) | | APPLICATION DIRECTIONS |
| CROP | (Pathogen) | ACRE | 100 Gal* | |
| Peach Nectarine Apricot Cherry Plum Prune | Leaf curl (Taphrina deformans) Shot hole (Wilsonomyces carpophilus) | 3 1/8 to 4 1/8 (2.34 to 3.1) | 1.0 to 1 3/8 (0.75 to 1.03) | For best control of both diseases, apply at leaf fall in late autumn, using sufficient water and proper sprayer calibration to obtain uniform coverage. When conditions favor high disease levels, use the high rate of application and apply once or twice more in mid to late winter before budswell. If the leaf fall application is not practical, application of LIBERTY CHLOROTHALONIL for control of leaf curl may be made at any time prior to budswell the following spring. Where shot hole occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections. Apply by ground or air. |
| | Brown rot blossom blight (Monilinia spp.) Lacy (russet) scab (plum/prune) | 3 1/8 to 4 1/8 2.34 to 3.1) | 1 to 1 3/8 (0.75 to 1.03) | Make one application at popcorn (pink, red or early white bud) and a second application at full bloom. If weather conditions favor disease development, make an additional application at petal fall. |
| | Black knot (cherry, plum) (Apiosporina morbosa) Cherry leaf spot (Blumeriella jaapii) Scab (Cladosporium carpophilum) | 3 1/8 to 4 1/8 (2.34 to 3.1) | 1 to 1 3/8 (0.75 to 1.03) | In addition to the bloom application listed above, make one application at shuck split. DO NOT apply LIBERTY CHLOROTHALONIL after shuck split and before harvest. If additional disease control is needed 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 to 14 days later. Apply by ground or air. |
| | Constriction canker (suppression) (Phomopsis amygdali) | 3.0 – 4.0 (2.25 – 3.0) | 1 to 1 1/3 (0.75 – 1.0) | By ground or air application only. Apply after fruit is harvested when leaf drop starts. Apply in sufficient spray volume for thorough coverage (recommend 50 to 100 gals. per acre) to adequately cover exposed leaf scars. Repeat on 10- |

| | | to 14-day intervals until leaf drop is complete. Use in |
|--|--|---|
| | | conjunction with cultural practices to reduce inoculum. |

- DO NOT apply more than 20.5 pints of LIBERTY CHLOROTHALONIL (15.4 lb ai) per acre per year.
- Minimum retreatment interval is 10 days.
- LIBERTY CHLOROTHALONIL may be applied through shuck split. LIBERTY CHLOROTHALONIL may then again be applied after harvest as indicated.

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

| CROP | DISEASES (Pathogen) | Pt Product/A (Ib ai/A) | APPLICATION DIRECTIONS |
|-----------|---|---------------------------|--|
| Persimmon | Cercospora leaf spot (Cercospora fuliginosa) | 1 ¼ (0.94) | Use in sufficient water to obtain adequate coverage. Begin applications when disease first threatens, and repeat at 14-day intervals as disease pressure warrants. |

Specific Use Restrictions:

- DO NOT apply more than 6.25 pints of LIBERTY CHLOROTHALONIL (4.69 lb ai) per acre per year.
- Minimum retreatment interval is 14 days.
- DO NOT apply within 14 days of harvest (14-day PHI).
- May be applied to persimmon only in the states of Florida and Hawaii.
- Aerial applications require the use of a minimum of 10 gallons per acre.

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

| CROP | DISEASES (Pathogen) | PT PRODUCT PER (Ib ai per) | | APPLICATION DIRECTIONS |
|-----------|---|-------------------------------|---------------------------------|--|
| | , , , | ACRE | 100 Gal* | |
| Pistachio | Botryosphaeria blight (B. dothidea) Suppression: Alternaria late blight (A. alternata) | 6.0 (4.50) | 3.0 (2.25) | Use a water volume of 20 to 200 gallons per acre. Make the first application at the beginning of the blossom period followed by an application at full bloom. Make additional applications as required on a 28-day schedule. For Septoria and Botrytis, use the higher rate if disease pressure is severe. NOTE: Use of this product may result in speckling or |
| | Botrytis blight (B. cinerea) Septoria leaf spot (S. pistacina) | 4.0 to 6.0 (3.00 to 4.50) | 2.0 to 3.0 (1.50 to 2.25) | reddening of the fruit hull (epicarp). This effect is superficial and has not resulted in any change in nut quality. Apply by ground or air. |

- DO NOT apply more than 30 pints of LIBERTY CHLOROTHALONIL (22.5 lb ai) per acre per year.
- Minimum retreatment interval is 28 days.
- DO NOT apply within 14 days of harvest (14-day PHI).

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

Conifers

Apply **LIBERTY CHLOROTHALONIL** in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Applications may be made by ground or air. DO NOT allow livestock to graze in treated areas.

| CROP | DISEASES (Pathogen) | PT PRODUCT PER/A (lb ai/A) | APPLICATION DIRECTIONS |
|--|--|--|--|
| Conifers (including Christmas trees) For use in 1) conifer nursery Beds | Swiss needlecast (Phaeocryptopus gaeumannii) Interior needle blight (Mycosphaerella spp. and Phaeocryptopus nudus) | 2 ¾ to 5 ½ (2.1 to 4.125) | One to Two Applications: In Christmas tree plantations or conifer stands, make one application in the spring when new shoot growth is ½ to 2 inches in length. Under high disease pressure, a second application may be made 10-14 days after the first application. When using aerial applications, use the highest rate. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |
| 2) Christmas tree and bough production plantations and 3) tree seed Orchards | Scleroderris canker (Gremmeniella abietina) Swiss.needlecast (P. gaeumannii) Interior needle blight (Mycosphaerella spp. and Phaeocryptopus nudus) | 1½ to 2¾ (1.125 to 2.1) | Multiple Applications: Make the first application in spring when new shoot growth is ½ to 2 inches in length. Make additional applications at 3 to 4-week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate specified on a 3-week schedule. When using aerial applications, use the highest rate. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |
| | Sirococcus tip blight (S. conigenus) Rhizosphaera needlecast (Rhizosphaera spp.) Scirrhia brown spot (Mycosphaerella dearnessii) | 2.0 to 3 ½ (1.50 to 2.62) 5 ½ (4.125) | |
| | Cyclaneusma (Cyclaneusma minus) And Lophodermium Needlecasts (Lophodermium spp.) | 2 ¾ to 5 ½ (2.1 to 4.125) | 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 occurrence of needle wetness. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |

| R | habdocline Needlecast (Rhabdocline weirii) | 1 ½ to 2 ¾ (1.125 to 2.1) | 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 to 4 weeks as specified above. In nursery beds, use the high rate on a 3 week schedule. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |
|---|---|------------------------------|--|
| P | otrytis seedling Blight (<i>Botrytis</i> spp.) homa twig blight (<i>Phoma</i> spp.) | 1½ to 2¾ (1.125 to 2.1) | 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 disease favorable conditions persist. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |
| W | Veir's cushion rust (Chrysomyxa weirii) | 5 ½ (4.125) | Begin applications when 10% of buds have broken and twice thereafter at 7- to 10-day intervals. Aerial application is allowed only for Christmas tree and bough production plantations and tree seed orchards. |

- DO NOT apply more than 22 pints of LIBERTY CHLOROTHALONIL (16.5 lb ai) per acre per year.
- DO NOT use on forests.
- DO NOT use exposed material as food or feed for livestock.
- Refer to specific listed DISEASES above for minimum retreatment interval.

STORAGE AND DISPOSAL

DO NOT contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

PESTICIDE STORAGE: Store in a tightly closed container in a cool, dry 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:

For plastic containers ≤ 5 gallons: 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 if available or puncture and dispose of in a sanitary landfill.

For plastic containers > 5 gallons: 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. Fill the container ¼ full with water. Recap and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill.

^{*}Volumetric rates to be used only with full dilute spray volume specified on this label for tree and orchard crops.

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