5905-527 03/11/2005 1/14

Please read instructions on reverse before completing form. Form Approved. OMB No. 2070-0060. Approval expires 2-28-95

EPA

United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☑ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification
5905-527		☑ None ☐ Restricted
4. Company/Product (Name) Chlorothalonil 90D	PM#	

5. Name and Address of Applicant *(Include ZIP Code)*
Helena Chemical Company
225 Schilling Boulevard, Suite 300
Collierville, Tennessee 38017

☐ *Check if this is a new address*

6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:
EPA Reg. No. _____
Product Name _____

Section - II

☐ Amendment - Explain below.
☐ Resubmission in response to Agency letter dated _____
☑ Notification - Explain below.
☐ Final printed labels in repsonse to Agency letter dated
☐ "Me Too" Application.
☐ Other - Explain below.

NOTIFICATION
MAR 11 2005

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

Other Revisions
Notification of Other Revisions per PR Notice 98-10. This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging	Unit Packaging	Water Soluble Packaging	2. Type of Container
☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	☐ Metal ☑ Plastic ☐ Glass ☐ Paper ☐ Other (Specify)
***Certification must be submitted**	If "Yes" Unit Packaging wgt. / No. per container	If "Yes" Package wgt / No. per container	

3. Location of Net Contents Information	4. Size(s) Retail Container	5. Location of Label Directions
☑ Label ☐ Container		☑ On Label

6. Manner in Which Label is Affixed to Product
Self Adhesive
☑ Lithograph, Paper glued, Stenciled ☐ Other _____

Section - IV

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

Name	Title	Telephone No. (Include Area Code)
Mandy K. Styles	Product Registration Supervisor	(901) 752-4420

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

6. Date Application Received (Stamped)

2. Signature	3. Title
Mandy K. Styles	Product Registration Supervisor
4. Typed Name Mandy K. Styles	**5. Date** 3/1/2005

2/14

NOTIFICATION

MAR 1 1 2005

CHLOROTHALONIL 90D

AGRICULTURAL FUNGICIDE

(90% Water Dispersible Granules)

ACTIVE INGREDIENT:	
Chlorothalonil (tetrachloroisophthalonitrile)	90.0%
INERT INGREDIENTS:	10.0%
TOTAL	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

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 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 immediately for advice.
IF ON SKIN OR CLOTHING:	•	Take off contaminated clothing.
	•	Rinse immediately with plenty of water for 15- 20 minutes.
	•	Call a poison control center or doctor for treatment advice.
IF INHALED:	•	Move victim 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 immediately for further treatment advice.
HOT LINE NUMBER		
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency assistance call toll-free, 1-800-424-9300 (ChemTrec).		
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.		

EPA REG. NO. 5905-527
EPA EST. NO.

NET CONTENTS:

MANUFACTURED BY
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TN 38017

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes irreversible eye damage. May be fatal if inhaled. **Do not** get in eyes or on clothing. Avoid contact with skin. **Do not** breathe dust. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical resistant to this product are made of waterproof material. If you want more options, follow the instructions for category A on EPA chemical-resistant category selection chart.

Mixers, loaders, applicators and all other handlers must wear:

- long-sleeved shirt and long pants
- shoes plus socks
- chemical resistant gloves such as or made of any waterproof material, such as polyethlene or polyvinyl chloride
- goggles or faceshield, and
- a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with any N, R, P, or HE filter.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, 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:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, 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 may be hazardous to aquatic organisms in neighboring areas. **Do not** contaminate water when disposing of equipment washwater or rinsate.

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

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 ground water, 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.

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, 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 statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

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

- coveralls
- chemical resistant gloves such as or made of any waterproof material
- shoes plus socks, and
- 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 6-1/2 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, and
- how to operate the eyeflush container.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a dry place.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, pesticide spray, 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 DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CHEMIGATION

Apply this product only through center pivot, motorized lateral move, traveling gun, solid set or 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.

Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes, or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil

surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

Posting required for chemigation does not replace other posting and re-entry interval requirements for farmworker safety, including those posted to comply with the Worker Protection Standard.

All words shall consist of letters at least 2-1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words **KEEP OUT**, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word **STOP**. Below the symbol shall be the words **PESTICIDES IN IRRIGATION WATER.**

For Sprinkler Chemigation:
The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

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

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

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

GENERAL INFORMATION

CHLOROTHALONIL 90D is an excellent fungicide when used according to label directions for control of a broad spectrum of plant diseases.

CHLOROTHALONIL 90D can be used effectively in dilute or concentrate sprays. Thorough, uniform coverage is essential for disease control. Coverage may be enhanced by adding SURFIX® spreader-sticker spray adjuvant.

GENERAL PRECAUTIONS AND RESTRICTIONS

This product must not be applied within 150 feet (for aerial and air-blast application) or 25 feet (for ground applications) of marine/estuarine water bodies unless that 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-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 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 3/4 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 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 drip potential.

BOOM LENGTH

For some use patterns, reducing the effective boom length to less than 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 applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

When applications are made with 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, small 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 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 for habitat for threatened or endangered species, non-target crops) in minimal (e.g., when wind is blowing away from sensitive areas).

Do not use on greenhouse-grown crops.

Do not combine in the spray 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. When combining with pesticides, surfactants, or fertilizers, refer to the labeling on the product that **CHLOROTHALONIL 90D** is being mixed with for specific tank mix instructions.

Do not combine with Dipel® 4L, Triton® AG-98, or Triton® B-1956 as phytotoxicity may result from the combination when applied to some crops on this label.

Dosage rates on this label indicate pounds of **CHLOROTHALONIL 90D** per acre, unless otherwise stated. Under conditions favoring disease development, the high rate specified and shortest application interval should be used.

The required amount of product should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount 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.

APPLICATION INSTRUCTIONS

FIELD AND ROW CROPS

Apply in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. Spray volume usually will range from 20 to 150 gallons per acre (200 to 1400 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. Both ground and aircraft methods of application are recommended unless specific directions are given for a crop. Application through sprinkler irrigation systems is not recommended unless specific directions are given for a crop. See application and calibration instruction below:

Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Special Directions
Beans (Snap)	7 days	Rust	1χ-2½ lbs.	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat at 7 day intervals.
		Botrytis blight(grey mold)	2 ½ lbs.	Same as above.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 10 lbs. of this product (9 lbs. a.i.) per acre per season. **Grazing Restrictions:** **Do not** graze treated areas or feed treated plant parts to livestock.		
Beans (Dry)- Navy, Pinto, Kidney, Lima, Blackeye	6 weeks	Rust Anthracnose Downy Mildew Cercospora leaf spot (Blackeye only)	1χ-1¾ lbs.	Use in sufficient water to obtain adequate coverage. Begin applications during early bloom stage or when disease first threatens and repeat at 7 to 10 day intervals. For use on beans harvested only with pods removed.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 6 β lbs. of this product (6 lbs. a.i.) per acre per season. **Grazing Restrictions:** **Do not** graze treated areas or feed treated plant parts to livestock.		
Cabbage, Chinese Cabbage (tight headed varieties only), Cauliflower, Broccoli, Chinese Broccoli, Brussels Sprouts	7 days – for Chinese Broccoli or Chinese Cabbage only	Alternaria leaf spot Downy mildew	1¼ lbs.	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 intervals.
		Ring spot (California only)	1¼ lbs.	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.
		Limitations: - **Do not** apply more than 13α lbs. of this product (12 lbs. a.i.) per acre per season.		
Carrot		Cercospora (early) blight Alternaria (late) blight	1¼-1½ lbs.	Use in sufficient water to obtain adequate coverage. Start applications when disease threatens and repeat at 7 to 10 day intervals. May be applied through sprinkler irrigation equipment. See calibration section following this table for directions.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 16β lbs. of this product (15 lbs. a.i.) per acre per season.		

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Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Special Directions
Celery	7 days	Cercospora (early) blight Setporia (late) blight	ϕ-1¼ lbs.	Use ϕ-2½ lbs. per acre on a 7 day schedule. Start applications when transplants are set in the field. Apply in sufficient water to obtain adequate coverage. May be applied through sprinkler irrigation equipment. See calibration section following this table for directions.
		Basal stalk rot *(Rhizoctonia solani)*	1¾-2½ lbs.	Same as above
		Pink rot (suppression)	2½ lbs.	Same as above
		Early blight, Late blight	1¼ -1½ lbs. per 100 gallons	For celery seed beds, apply 125 gallons per acre. Start applications shortly after crop emergence. Use higher rate under severe disease conditions.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 17 7/9 lbs. of this product (18 lbs. a.i.) per acre per season.		
Corn (sweet), Corn grown for seed	14 days	Helminthosporium leaf blights Rust	ε- 1½ lbs.	Use in sufficient water to obtain adequate coverage. Begin applications when conditions favor disease development. Under severe disease conditions, use 1¼-1½ lbs. per acre.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 10 lbs. of this product (9 lbs. a.i.) per acre per season. - **Do not** apply to sweet corn to be processed. **Grazing Restrictions:** - **Do not** allow livestock to graze in treated fields. - **Do not** ensile treated corn or use as livestock forage.		
Cranberry	50 days	Fruit rots Lophodermium leaf/twig blight	3½-5½ lbs.	Apply at early bloom and repeat at 10 to 14 day intervals. Under severe disease conditions, use the 5½ lbs. per acre rate on a 10 day schedule. May be applied through sprinkler irrigation equipment. Use 300 gallons of water per acre through solid set systems only. See calibration section following this table for directions.
		Limitations: - **Do not** apply more than 16β lbs. of this product (15 lbs. a.i.) per acre per season. **Do not** apply to bogs when flooded or allow release of irrigation water from bogs for at least 3 days following application.		
Cucurbits – Cucumber, Cantelope, Muskmelon, Honeydew melon, Watermelon, Squash, Pumpkin	-	Anthracnose Downy mildew Target spot	1¼-1½ lbs.	Use in sufficient water to obtain adequate coverage. Begin applications when plants are in first true leaf stage or when conditions are favorable for disease development. Repeat applications at 7 day intervals. Under severe conditions, shorten spray interval. May be applied through sprinkler irrigation equipment (solid set, portable wheel move, or center pivot systems only). See calibration direction following this table.
		Cercospora leaf spot Gummy stem blight (black rot) Alternaria leaf blight Scab Powdery Mildew (Sphaerotheca only)	1½-2½ lbs.	Same as above.
		Cucumber belly rot *(Rhizocatonia solani)*	7 lbs.	Use in sufficient water to obtain runoff to soil surface. Make a single application when vines begin to form. May be applied through sprinkler irrigation. See calibration section following this table for directions.

Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Special Directions
Grasses grown for seed	14 days	Stem rust Leaf rust Stripe rust Septoria leaf spot Glume blotch Bipolaris leaf spot Drechslera leaf spot	ϕ-1β lbs.	Use sufficient coverage 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.
		Selenophoma (eyespot)	ϕ-1β lbs.	Same as above.
		Limitations: - **Do not** apply more than 5 lbs. of this product (4.5 lbs. a.i.) per acre per season. **Grazing Restrictions:** - **Do not** allow livestock to graze in treated areas or feed treated plants to livestock.		
Mint (For use ONLY in Indiana, Michigan, and Wisconsin)	80 days	Rust Septoria leaf spot	1χ lbs.	Use sufficient coverage to obtain adequate coverage. Begin applications when emerging plants are 4-8 inches high. Repeat applications at 7 to 10 day intervals.
		Limitations: - **Do not** re-apply within 7 days of last treatment. - **Do not** apply more than 3 times per season - **Do not** feed fresh or extracted mint hay from treated fields to livestock.		
Onion (dry bulb)	7 days	Botrytis leaf blight/blast Botrytis neck rot (suppression) Purple blotch	ϕ-1¾ lbs. Low Disease Hazard & Prior to Infection: ϕ lbs. (Every 10 days) Low Disease Hazard & Some Disease Present: 1χ lbs. (Every 7 to 10 days) High Disease Hazard: 1¾ lbs. (Every 7 days)	Apply in sufficient water to obtain thorough coverage of tops. This product is recommended for use with disease monitoring systems, which adjust fungicide rates and frequency of application according to disease hazard. See application rates in Rate/Acre section under these conditions. For suppression of neck rot (*Botrytis spp*) during storage, a minimum of three weekly applications prior to lifting, using 1χ -1¾ lbs. per acre is recommended.
		Limitations: - Do not apply more than 16β lbs. of this product (15 lbs. a.i.) per acre per season.		
Onion (green bunching), Leeks, Shallots, Onion grown for seed **Garlic**	14 Days 7 days	Botrytis leaf blight/blast Downy mildew (suppression) Purple blotch	1χ-2¼ lbs.	Use sufficient water to obtain thorough coverage of tops. Begin applications prior to favorable infection periods, and repeat at 7 to 10 day intervals as long as conditions favor disease. Use the high rate 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.
		Limitations: - **Do not** apply more than 3 times per season for green bunching onions, leeks, and shallots.		
Papaya	-	Alternaria fruit spot Antracnose Stem end rot	1¾ -2½ lbs.	Apply with ground equipment only, in sufficient water to obtain adequate coverage on 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.
		Limitations: - **Do not** apply more than 7½ lbs. of this product (6.75 lbs. a.i.) per acre per season. **Grazing restrictions:** - **Do not** graze livestock in treated area or feed processing by-products to livestock.		
Parsnip	10 days	Alternaria leaf spot Antracnose Downy mildew Botrytis blight(grey mold) Bottom rot (*Rhizoctonia)*	1χ-1β lbs.	Apply in sufficient water to obtain adequate coverage. Make the first application at the first sign of disease or when conditions are favorable for infections. Continue applications on a 7 to 10 day schedule.
		Limitations: - **Do not** apply more than 6 β lbs. of this product (6.0 lbs. a.i.) per acre per season. - **Do not** apply more than 4 times per season. **Grazing restrictions:** - **Do not** feed treated plant parts to livestock.		

Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Special Directions
Passion Fruit (Hawaii Only)	-	Alternaria fruit and leaf spot (passion fruit brown spot)	1½ lbs.	Apply with ground equipment only, in sufficient water to obtain adequate coverage on fruit and leaves. Begin treatment when fruit spots appear (April to July) and continue treatments at 14 day intervals until weather conditions no longer favor disease development.
		Limitations: - **Do not** apply more than 8½ lbs. of this product (7.5 lbs. a.i.) per acre per season. **Grazing restrictions:** - **Do not** graze livestock in treated area or feed processing by-products to livestock.		
Peanut	14 days	Cecospora (early)leaf spot Cercosporidium (late) leaf spot	1–1¼ lbs.	Apply in sufficient water for adequate coverage when leaf wetness first occurs and before disease symptoms appear, generally 30 to 40 days after planting. When late leaf spot prevails or when rust or web blotch occur, apply 1¼ lbs. per acre. May be applied through sprinkler irrigation equipment. See calibration section following this table for directions.
		Rust Web blotch	1¼ lbs.	Same as above.
		Limitations: - **Do not** re-apply within 14 days of last treatment. - **Do not** apply more than 10 lbs. of this product (9 lbs. a.i.) per acre per season. **Grazing restrictions:** - **Do not** graze livestock in treated area. - **Do not** feed hay or threshings from treated fields to livestock.		
Soybean Determinate (Southern) Varieties	-	Anthracnose Diaporthe pod and stem blight Frogeye leaf spot *(Cercospora sojina)* Purple seed stain Cercospora leaf blight *(Cercospora kikuchii)* Septora brown	1χ- 2 lbs. (2 application program) or ϕ-1½ lbs. (3 application program)	Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use three application program in areas having a history of moderate to severe disease intensity. May be applied through sprinkler irrigation equipment. See calibration section following this table for directions. **Two application program:** Make the first application at early pod set (R3) stage, when majority of pods are χ to δ inch in length and the second at beginning of seed formation (R5) which occurs about 14 days later. **Three application program:** Make the first application at the beginning of flowering (R1), and the second at seed formation (R5).
		Stem canker *(Diaporthe phaseolorum var.caulivora)*	ϕ lbs.	Apply in 10 to 20 gallons of water per acre, as a band treatment directing spray to provide coverage of entire plant. Make one application at emergence of second trifoliate leaves (V2). If conditions favor continued infection, make additional applications at 14 day intervals.
		Limitations: - **Do not** re-apply within 14 days of last treatment. - **Do not** apply more than 5 lbs. of this product (4.5 lbs. a.i.) per acre per season. **Grazing restrictions:** **Do not** feed treated plant parts to livestock or allow grazing in treated fields.		
Soybean Indeterminate (Northern) Varieties	-	Anthracnose Diaporthe pod and stem blight Frogeye leaf spot *(Cercospora sojina)* Purple seed stain Cercospora leaf blight *(Cercospora kikuchii)* Septora brown	1χ- 2 lbs. (2 application program) or ϕ-1½ lbs. (3 application program)	Apply in sufficient water to obtain complete coverage, using at least five gallons of water per acre for aerial application. Use three application program in areas having a history of moderate to severe disease intensity. May be applied through sprinkler irrigation equipment. See calibration section following this table for directions. **Two application program:** Make the first application at early pod set (R3) stage, when majority of pods are χ to δ inch in length and the second at beginning of seed formation (R5) which occurs about 14 days later. **Three application program:** Make the first application at the beginning of flowering (R1), and the second at seed formation (R5).
		Limitations: - **Do not** re-apply within 14 days of last treatment. - **Do not** apply more than 5 lbs. of this product (4.5 lbs. a.i.) per acre per season. **Grazing restrictions:** **Do not** feed treated plant parts to livestock or allow grazing in treated fields.		

Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Special Directions
Tomato – Foliage	-	Early blight Late blight Gray leaf spot Gray leaf mold Septoria leaf spot Target spot	1¾ -1¾ lbs.	Apply in sufficient water to obtain adequate coverage. Begin applications when dew or rain occur and disease threatens. Use highest and shortest interval specified when disease conditions are severe. May be combined with EPA-registered products that claim copper as the active ingredient and are labeled for control of bacterial diseases of tomatoes.* Check the manufacturer's label for specific instructions, precautions, and limitations prior to mixing. May be applied through sprinkler irrigation equipment (solid set or portable wheel move systems only). See calibration section following this table for directions.
Tomato- Fruit	-	Anthracnose Alternaria fruit spot (black mold) Rhizoctonia fruit rot Late blight fruit rot Botrytis gray mold	1¾ -2¾ lbs.	Same as above.
		Limitations: - **Do not** apply more than 16-7/9 lbs. of this product (15.1 lbs. a.i.) per acre per season. - **Do not** use with **Copper Count® N** in concentrated spray suspensions. **Grazing restrictions:** - **Do not** graze livestock in treated area or feed processing by-products to livestock.		

CALIBRATION TECHNIQUES FOR SPRINKLER IRRIGATION

CHLOROTHALONIL 90D 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.

Always inject CHLOROTHALONIL 90D 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.

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.

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 recommended amount of **CHLOROTHALONIL 90D** for acreage to be covered into the 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 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 product for acreage to be covered with water so that the total mixture 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. **CHLOROTHALONIL 90D** 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 product as been cleared from last sprinkler head.

TREE AND ORCHARD CROPS

Apply **CHLOROTHALONIL 90** 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.

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Crop	Pre-Harvest Interval (PHI)	Disease	Rate/Acre	Rate/ 100 gallons	Special Directions
Peach Nectarine Apricot Tart Cherry Plum Prune	-	Leaf curl Coryneum blight (shothole)	2½-3½ lbs.	ϕ-1χ lbs.	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 for control of leaf curl may be made at any time prior to budswell the following spring. Where Corneum blight (shothole) occurs, apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.
		Brown rot blossom blight Lacy (russet) scab (plum/prune)	2½-4½ lbs.	ϕ-1χ lbs.	Use 3½-4½ per acre on trees taller than 20 ft. and 2½-3½ per acre on smaller trees. 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.
		Limitations: - **Do not** re-apply this product within 7 days of last treatment. - **Do not** apply more than 10 lbs. of this product (9 lbs. a.i.) per acre per season. **Grazing Restrictions:** **Do not** graze treated areas or feed treated plant parts to livestock.			

If application with ground equipment is not feasible, product may be applied with aircraft using at least 20 gallons per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate listed may be used. **Do not** allow livestock to graze in treated areas.

The following spray volumes are recommended as gallons of spray per acre:

CROP	SPRAY VOLUME (Gallons per acre)
Peach	20 (concentrate) – 300 (Full Dilute)
Nectarine	20 (concentrate) – 300 (Full Dilute)
Apricot	20 (concentrate) – 300 (Full Dilute)
Tart Cherry	20 (concentrate) – 300 (Full Dilute)
Plum	20 (concentrate) – 300 (Full Dilute)
Prune	20 (concentrate) – 300 (Full Dilute)
Sweet Cherry	20 (concentrate) – 300 (Full Dilute)

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

*SURFIX™ is a trademark of Helena Holding Company.
**DIPE® is a registered trademark of Abbott Laboratories.
***TRITON AG-98™ and TRITON B-1956™ are trademarks of Rohm and Haas Company.
*COPPER-COUNT® is a registered trademark of Mineral Research and Development Co.

HELENA CHEMICAL COMPANY
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March 1, 2005

U.S. Environmental Protection Agency
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
1801 South Bell Street
Crystal Mall #2, Room 266A
Arlington, VA 22202-4501

RE: Notification to Add Other Revisions

To Whom It May Concern,

Enclosed, you will find Helena Chemical Company's Notification for numerous products. Helena has updated the copyright company name, all trademarks, and registered trademarks from Helena Chemical Company to Helena Holding Company. This has been done on the following products:

Weed Rhap A-4D	5905-501
Weed Rhap A4-MCPA Herbicide	5905-502
Weed Rhap A-6D Herbicide 2,4-D Amine	5905-503
Weed Rhap LV-4D	5905-505
Transvaal Weed Rhap LV-4 MCPA Herbicide	5905-506
Weed Rhap Low Volatile Granular D Herbicide	5905-507
Weed Rhap LV-6D	5905-508
MCPA Sodium Salt	5905-510
Setre Carbaryl 80WP Insecticide	5905-517
Trifluralin 4EC	5905-519
Par F 70 Soluble Oil	5905-520
Trifluralin 60D	5905-521
Atrazine 90DF	5905-522
Propanil 60D	5905-523
Copper Z 6/2 Granular Algicide	5905-524
Chlorothalonil 90D	5905-527
Barrage HF	5905-529
Allityn Insect Repellent	5905-531
Trifluralin HFP	5905-532
Pro-Mate Barricade 0.375% Plus Fertilizer	5905-535

This should also be noted on all alternate brand names of the master labels.

In support of these Notifications, you will find the following:

EPA Form 8570-1
1 copy of the revised label highlighted

If you have any questions, do not hesitate to call me at (901) 752-4420 or by fax at (901) 758-1694. Thank you for your assistance in this matter.

Sincerely,

Mandy K. Styles
Product Registration Supervisor