

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

John Tice Loveland Products, Inc. 7251 W 4th Street PO Box 1286 Greeley, CO 80632-1286 OCT 3 0 2007

SUBJECT: Label Amendment Per Agency Letter Dated July 27, 2007

Ensign 720 Flowable EPA Reg. No. 34704-966

Your Submission Dated August 29, 2007

Dear Mr. Tice:

In a letter dated July 27, 2007 the Agency requested that you add use site restriction language to the label for Chlorothalonil. The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

- 1. Make the following labeling change:
- On page 2, in the General Precautions and Restrictions section, delete "Use of this product on home lawns is prohibited."

Submit one copy of your final printed labeling before you release the product for shipment.

If you have any questions regarding this correspondence, contact Rose Kearns of my staff by phone at 703-305-5611 or via email at kearns.rosemary@epa.gov or myself at 703-308-9443 or via email at kish.tony@epa.gov.

Sincerely,

Tony Kish

Product Manager (22)
Fungicide Branch
Registration Division (7504P)

Enclosure



OCT 3 0 2007 Under the Faderal Inscettelde, Furrishie, and Rodenticide Act as risended, for the posticide registered under EPA Reg. No. 34 70 4-966

ACTIVE INGREDIENT:
Chlorothalonil (tetrachloroisophthalonitrile) 54.0%
OTHER INGREDIENTS: 46.0%
TOTAL 100.0%

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

KEEP OUT OF REACH OF CHILDREN CAUTION

See additional precautionary statements and directions for use inside booklet.

FIRST AID				
if swallowed:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.			
	Do not give anything by mouth to an unconscious person.			
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.			

NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800 301-7976.

EPA REG. NO. 34704-966 EPA EST. NO. 50534-TX-001 NET CONTENTS 2½ GALS. (9.46 L)

EXP 08/07

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)

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

Mixers, Loaders, Applicators and all other handlers must wear: Long-sleeved shirt and long pants, chemical resistant gloves made of any waterproof material -Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton), shoes plus socks, protective eyewear, NIOSH approved dust/mist filtering respirator (MSHA/NIOSH approval number prefix-TC 21C) or a NIOSH approved respirator with any N, R, P or HE filter for applicators and handlers in enclosed areas such as a greenhouse.

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 Control Statements

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove 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 wash water 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 contamination.

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 over-laying 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.

Ensign® 720 should be used only in accordance with recommendations on this label or in separately published supplemental labeling recommendations for this product.

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 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 water roof material, shoes plus socks and protective everywaer.

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 6.5 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.

Agricultural Use Requirements cont'd.:

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 eyellush container.

Non-Agricultural Uses

For use to control diseases on turf on golf courses, lawns around institutional, public, commercial and industrial buildings. NOTE: Use of this product on home lawns is prohibited.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

DO NOT enter or allow others to enter area until sprays have dried.

GENERAL INFORMATION

Ensign 720 is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. Ensign 720 is recommended for use in programs that are compatible with the principles of Integrated Pest Management (IPM), which include the use of disease resistant crop varieties, cultural practices, pest scouting and disease forecasting systems, which reduce unnecessary applications of pesticides.

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

GENERAL PRECAUTIONS AND RESTRICTIONS

Use of this product on home lawns is prohibited.

Agricultural Use Sites Only (sodfarms, farms, forests, nurseries and greenhouses): This product must not be applied 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.

DO NOT combine Ensign 720 in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurious under your conditions of use. DO NOT combine Ensign 720 with Dipel®, Latron B-1956® or Latron AG-98®, horticultural oil, and products containing xylene as phytotoxicity may result from the combination when applied to some species on this label.

The required amount of Ensign 720 should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Ensign 720 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.

Spray Drift Precautions

DO NOT apply when wind speed favors drift beyond the target area. Observe all spray drift precautions for ground, aerial and chemigation applications.

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 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.
- 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 supercede 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 - Onenting 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 % 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 downward. 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. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

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

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes.small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft 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, nontarget crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

APPLICATION

Application and Calibration Techniques for Sprinkler Irrigation - Chemigation

Apply this product only through center pivot, motorized lateral move, 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. DO NOT use Ensign 720 through sprinkler irrigation equipment on golf courses.

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 Ensign 720 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.

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.

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.

All words shall consist of letters at least 2½ inches tail, 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.

This sign is in addition to any sign posted to comply with the Worker Protection Standard.

Ensign 720 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.

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 Ensign 720 for acreage to be covered into same amount of water used during calibration and inject into system continu-

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 Ensign 720 for acreage to be covered with water so that the total mixture of Ensign 720 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. Ensign 720 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 Ensign 720 has been cleared from last sprinkler head.

DIRECTIONS FOR APPLICATION

TURF

Group A. Golf Course Fairways, Sod Farms, Lawns (around institutional, public, commercial and industrial buildings), Ornamental & Other Turfgrasses.

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

NOTE: Sodfarm turf treated with chlorothalonil prior to harvest must be mechanically cut, rolled and harvested.

Do not use for sodfarms at application rates greater than 13 pounds of active ingredient, per acre, per year.

Do not apply more than 16.9 pints/acre of Ensign 720 per growing season (13 lbs. Al/acre/growing season). The minimum re-treatment interval for single application rates **up to** 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 7 days. The minimum retreatment interval after an application of a rate **greater than** 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 14 days. Do not apply more than one application of a rate greater than 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. ai./acre) per growing season. The maximum single application rate is 16.9 pints/acre of Ensign 720 (13 lbs. Al/acre). Apply Ensign 720 in 30 to 40 gallons of water per acre. Begin applications when conditions favor disease development and repeat applications as long as these conditions persist. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Ensign 720 should always be used in conjunction with good turf management practices.

Group B. Golf Course Tees and Greens

Golf Course Tees: Do not apply more than 69.3 pints/acre (25.4 fl. ozs/1000 sq. ft.) of Ensign 720 (52 lbs. Al/acre) per growing season. The minimum re-treatment interval for single application rates up to 9.75 pints/acre (3.6 fl. ozs/1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 7 days. The minimum re-treatment interval after an application of a rate greater than 9.75 pints/acre (3.6 fl. ozs/1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 14 days. Do not apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl. ozs/1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) per growing season. The maximum single application rate is 15.1 pints/acre (5.5 fl. ozs/1000 sq. ft.) of Ensign 720 (11.3 lbs. Al/acre).

Golf Course Greens: Do not apply more than 97.3 pints/acre (35.7 fl. ozs./1000 sq. ft.) of Ensign 720 (73 lbs. Al/acre) per growing season. The minimum re-treatment interval for single application rates up to 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 7 days and the minimum re-treatment interval after an application of a rate greater than 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) is 14 days. Do not apply more than two applications of a rate greater than 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) of Ensign 720 (7.3 lbs. Al/acre) per growing season. The maximum single application rate is 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) of Ensign 720 (11.3 lbs. Al/acre).

Apply Ensign 720 in an adequate amount of water to provide complete coverage. This amount may vary from 90 to 450 gallons per acre. See table below for suggested rates and timing. Under severe disease conditions use the highest rate and shortest interval corresponding with the application schedule selected from the table below.

DO NOT mow or water after treatment until spray deposited on turfgrass is thoroughly dry; Ensign 720 should always be used in conjunction with good turf management practices.

		Pre-Disease Rates ^a			Post-Disease Rates a		
Diseases Controlled*	Application Interval (days)	fl. oz. Product/ 1000 sq. ft.	pints product/ acre	lbs. ai/acre	fl. oz. product/ 1000 sq. ft.	pints product/ acre	lbs. ai/acre
Dollar Spot	7 to 10 7 to 21	1.0 b to 2.0 2.0 to 3.6	2.8 ^b to 5.0 5.5 to 9.75	2.1 b to 4.1 4.1 to 7.3	-	- -	
	14	-	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Leafspot	7 to 10	2.0	5.5	4.1	-	-	-
Melting-out	7 to 21	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	-	· -	-
Brown Blight	14		-		4.0 to 5.5	11 to 15.1	8.25 to 11.3
Brown Patch	7 to 14 14	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Gray Leafspot	7 to 10	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	4.0 to 5.5	11 to 15.1	8.25 to 11.3
Red Thread	7 to 10	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3		-	-
	14	3.6 to 5.5	9.9 to 15.1	7.4 to 11.3	5.5	15.1	11.3
Anthracnose	7 to 14	3.0 to 3.6	8.3 to 9.75	6.2 to 7.3	-	÷ ,	-
	14	3.65 to 5.5	9.9 to 15.1	7.4 to 11.3	- 1	-	-
Copper Spot	14	4.0 to 5.5	.11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Stem Rust (Bluegrass)	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
DICHONDRA: Leafspot (CA only)	14	4.0 to 5.5	11 to 15.1	8.25 to 11.3	5.5	15.1	11.3
Gray Snow . Mold ^C	30	5.5	15.1	11.3	-	,*	-
Fusarium (Gerlachia) Patch ^C	21 to 28	5.5	15.1	11.3	-	•	-
Algae ^C	7 to 14	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3	2.0 to 3.6	5.5 to 9.75	4.1 to 7.3
	14	-	-	-	4.0 to 5.5	11 to 15.1	8.25 to 11.3

aGroup A Turf: Limit of one application per season at rates greater than 7.3 lbs. Al/acre (9.75 pints/acre or 3.6 fl. oz./1000 sq. ft.) of Ensign 720 Croup B Turf: Limit of one application per season at rates greater than 7.3 lbs. Al/acre (9.75 pints/acre or 3.6 ft.) of Ensign 720.

Group B Turf: Limit of two applications per season at rates greater than 7.3 lbs. Al/acre (9.75 pints/acre or 3.6 oz./1000 sq. ft.) of Ensign 720.

bLow rate is not effective on intensively mowed turfgrasses such as golf course tees and greens.

Csee specific use directions below.

Diseases listed are caused by fungi, some of which are named as follows:

Dollar spot: Sclerotinia homeocarpa; Lanzia or Moellerodiscus spp.

Leafspots, Melling-out, Brown blight: Drechslera spp. (including D. poae, D. siccans), Bipolaris sorokiniana, Curvularia spp.

Brown patch: Rhizoctonia solani, R. zeae, R. cerealis
 Gray leafspot: Pyricularia grisea, P. oryzae

Gray leatspot: Pyricularia grisea, P. oryza
Red thread: Laetisaria fuciformis
Anthracnose: Colletotrichum graminicola
Copper spot: Gloeocercospora sorghi
Stem rust: Puccinia graminis
Dichondra leaf spot: Altemaria spp.
Gray snow mold: Typhula spp.
Fusarium (Gerlachia) Patch

• Algae

Gray snow mold caused by *Typhula* spp. - Group A and B - Turf: Apply in sufficient water to obtain adequate coverage (2 to 10 gallons per 1,000 sq. ft.). Apply one application 15.1 pints/acre (5.5 ft. ozs./1000 sq. ft.) of Ensign 720 (11.3 lbs. Al/acre). Application must be made before snow cover in autumn. Group B Turf: it snow cover is intermittent or lacking during the winter, a second application of Ensign 720 at 15.1 pints/acre.(5.5 ft. ozs./1000 sq. ft.) may be applied one month after the first application.

Fusarium (Gerlachia) patch: Group A and B Turf: In areas where pink snow mold (Gerlachia or Fusarium patch) is likely to occur, apply Ensign 720 at 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) (11.3 lbs. Al/acre) in combination with products containing prodione at 88 ozs. Al/acre (2 ozs. Al/1000 sq. ft.) of turf area. Read and observe all label directions for products containing these active ingredients. For control of Fusarium patch only in areas where snow cover is intermittent or lacking during the winter, apply 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) of Ensign 720 (11.3 lbs. Al/acre). Make application in late autumn. Group B Turf: Apply a second application of 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) of Ensign 720, 21 to 28 days after the first application unless conditions lavorable for Fusarium patch no longer prevail.

Algae: Group A and B Turf: For prevention of algae on turtgrasses, apply Ensign 720 at the rate of 5.5 to 9.75 pints/acre (2.0 to 3.6 fl. ozs./1000 sq. ft.) (4.1 to 7.3 lbs. Al/acre) on a 7 to 14 day schedule. Under severe algae conditions use the 9.75 pints/acre (3.6 fl. ozs./1000 sq. ft.) rate and apply on a 7 day schedule.

When algae is well established, every attempt should be made to dry out the afflicted area. Once dry, spiking or verticutting should be done to enhance turfgrass recovery in conjunction with a Ensign 720 application at the rate of 11 to 15.1 pints/acre (4.0 to 5.5 fl. ozs./1000 sq. ft.). Group B Turf: A second application of Ensign 720 at the 15.1 pints/acre (5.5 fl. ozs./1000 sq. ft.) rate may be made 14 days after the first application.

Group A and B Turf: Following application of the 15.1 pints/acre (5.5 fl. ozs/1000 sq. ft.) rate, several applications of Ensign 720 at a rate of 5.5 to 9.75 pints/acre (2.0 to 3.6 fl. ozs./1000 sq. ft.) (4.1 to 7.3 lbs. Al/acre) on a 7 to 14 day interval may be necessary for turfgrass recovery. Only a preventive spray program with Ensign 720 will prevent a recurrence of the algae when environmental conditions are favorable.

Ornamental Plants

Apply Ensign 720 at a rate of 1 3% pints (1.0 lb. Al) per 100 gallons of water unless other directions are given in the tables below. DO NOT apply more than 48.5 pints Ensign 720 (36.4 lbs. Al/acre) per growing season to field grown ornamentals. Apply in a spray to run-off, when conditions are favorable for disease development. Repeat applications at 7 to 14 day intervals until conditions are no longer lavorable. During periods when conditions favor severe disease incidence, generally cloudy or wet weather, apply Ensign 720 at 7 day intervals. The minimum re-treatment interval is 7 days. Ensign 720 should be applied to plants when both foliage and flowers are dry, or nearly dry.

DO NOT combine Ensign 720 in the spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination to be physically compatible, effective and noninjurious under your conditions of use.

Ensign 720 may be used in greenhouses. DO NOT use mistblowers or high pressure spray equipment when making applications of Ensign 720 in greenhouses.

Use of Ensign 720 is recommended for control of fungal diseases referred to by numbers in parentheses following each ornamental. Ornamentals listed on this label have been tested and found to tolerate applications of Ensign 720 at the recommended rates. The user should test for possible phytotoxic responses, using recommended rates on ornamental plants on a small area prior to commercial use. Applications made during bloom may damage flowers and/or fruits.

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

Ornamentals recommended for treatment with Ensign 720

Broadleaf Shrubs And Trees

Andromeda (Pieris) (4)
Ash (Fraxinus) (1)
Aspen (1)
Azalea (1,2,4)
Buckeye, Horsechestnut (1)
Cherry-Laurel (1)
Crabapple (1,6,8)
Dogwood (1)
Eucalyptus (3)
Euonymus (1)
Firethorn (Pyracantha) (1)
Flowering Almond (1,2)
Flowering Plum (1,2)
Flowering Plum (1,2)
Flowering Quince (1,2)
Hawthorn (1,6)

Holly (1)
Lilac (5)
Magnolia (1)
Mountain Laurel (1)
Oak (red group only) (1,7)
Oregon-Grape (Mahonia) (6)
Photinia (1)
Poplar (1)
Privet (Ligustrum) (1)
Frivethorn (Pyracantha) (1)
Flowering Almond (1,2)
Sequoia (1)
Flowering Plum (1,2)
Flowering Quince (1,2)
Hawthorn (1,6)

Holly (1)

Apilea (5)
Magnolia (1)
Poplar (1)
Privet (Ligustrum) (1,7)
Sequoia (1)
Sequoia (1)
Sycamore, Planetree (1)
Viburnum (5)
Walnut (Juglans) (1)

Flowering Plants a and Bulbs

Arabian Violet (2) Iris, bulbous (1) Lily (1) Lily, Asiatic (1) Marigold (1) Begonia (1) Camellia (2) Carnation (1,2) Chrysanthemum (1,2) Narcissus (1) Crocus (1) Pansy (1) Daffodil (1) Petunia (1,4) Daisy (1) Phlox (1) Geranium (1,6) Poinsettia Þ (1) Gladiolus (1,2) Rose c (1) Hollyhock (6) Statice (1) Hydrangea (foliage only) (1,6) Tulip (1) Zinnia (1,5)

bDiscontinue applications priò. ... oract formation; phytotoxicity is possible on the

c Use 1 pint Ensign 720 (.75 lbs. Al) per 100 gallons of water.

Foliage Plants

Aglaonema (1)
Areca palm (1)
Artemesia (1)
Dumbcane (Diffenbachia) (1)
Dracaena (1)
Fatsia (Aralia) (1)
Ficus (1)
Lipstick plant (1)
Ming aralia (1)

Oyster plant (Rhoeo) (1)
Pachysandra d (1)
Parlor palm (Chamaedorea) (1)
Peperomia (1)
Philodendron (1,4)
Prayer plant (Maranta) (1)
Syngonium (1)

Zebra plant (Aphelandra) (1)

d Use 2% pints of Ensign 720 (2.1 lbs. AI) per 100 gallons of water.

Diseases Controlled with Ensign 720 1. Leafspots/Foliar Blights:

Actinopelte leafspot
Alternaria leafspot/leaf blight
Anthracnose leaf blotch, spot
Anthracnose (Discula) blight
Ascochyta blight
Bipolaris (Helminthosporium) leafspot
Black spot on roses
Botrytis leafspot, leaf blight
Cephalosporium leafspot
Cercospora leafspot
Cercosporidium leafspot
Corynespora leafspot
Corynespora leafspot
Corynespora leafspot
Curvularia leafspot
Cylindrosporium leafspot
Dactylaria leafspot
Didymellina leafspot
Drechslera leafspot
Drechslera leafspot

Fabraea (Entomosporium) leafspot Fusarium leafspot Gloeosporium black leafspot Ink spot (Drechslera) Marssonina leafspot Monilinia blossom blight, twig blight Myrothecium leafspot, brown rot Nematostoma leaf blight Phyllosticta leafspot Ramularia leafspot Ramularia leafspot Sphaeropsis leafspot Sphaeropsis leafspot Stagonospora leaf scorch Tan leaf spot (Curvularia) Volutella leaf blight

2. Flower spots/blights:

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

3. Cylindrocladium stem canker

4. Phytophthora leaf blight, dieback

5. Powdery mildews:

Erysiphe cichoracearum

Microsphaera spp.

6. Rusts:

Gymnosporangium spp. Pucciniastrum hydrangeae Puccinia spp.

7. Taphrina bliste

8. Scab (Venturia inaequalis)

The following ornamental plant species which have been tested with Ensign 720 at recommended rates did not exhibit phytotoxicity:

Botanical Name Aechmea fasciata Araucaria heterophylla Bougainvillea spp. Caladium spp. Calathea makoyana Calistephus chinensis Carissa grandiflora Clerodendron thomsonae Codiaeum spp. Cordyline terminalis Crassula argentea Dionaea muscipula Dizygotheca elegantissima Epipremnum aureum Episcia cupreata Fittonia spp. Gerbera jamesonii Gynura sarmentosa Gypsophila paniculata Hoya spp. llex cornuta llex crenata Impatiens spp.

Hoya spp.
Ilex cornuta
Ilex cornuta
Ilex crenata
Impatiens spp.
Pilea cadierei
Sansevieria trifasciata "Hahnii"
Tolmeia menziesii
Yucca elephantipes
Zygocactus truncatus

Common Name Aechmea Norfolk Island Pine Bougainvillea Caladium Peacock plant

Aster

Natal plum

Bleeding Heart Croton Ti Plant Jade Plant Venus Fly Trap False Arália Golden Pothos, Scindapsus Flame Violet Silver-nerve Plant Gerbera Daisy Purple Passion Vine Baby's Breath Wax Plant Chinese Holly Japanese Holly Impatiens Aluminum Plant Birdsnest Sansevieria Piggy-back Plant Spineless Yucca Christmas Cactus

NOTE: DO NOT apply Ensign 720 to either green or variegated Pittosporum or to Schefflera, as multiple applications have been demonstrated to cause phytotoxic responses.

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

Tree and Orchard Crops

Apply Ensign 720 in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. Application with ground equipment is preferable to aerial application because ground applications generally give better coverage of the tree canopy. If application with ground equipment is not leasible, Ensign 720 may be applied with aircraft using at least 20 gallons of spray per acre. When concentrate sprays are used or when treating non-bearing or immature trees, the lower rate of Ensign 720 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 VO	SPRAY VOLUME (Gallons per Acre)				
Peach	20 (conce	20 (concentrate) to 300 (full dilute)				
Nectarine	1	, , ,				
Apricot]	• •				
Tart Cherry						
Plum						
Prune						
Sweet Cherry	20 (conce	ntrate) to 300 (full dilute)				
Conifers	DILUTE	CONCENTRATE				
Forest stands	Not used	10 to 20 (aircraft)				
Christmas trees	100	10 to 50 (aircraft or ground equipment)				
Nursery beds	100	5 to 10 (ground equipment only)				

	DISEASES Leaf curl Coryneum blight (shothole)	Ensign 720 Rate Pints/acre or 100 gal. (Ibs. Al/acre or 100 gal.)			
CROP		ACRE	100 GAL*	APPLICATION DIRECTIONS	
Peach Nectarine Apricot Cherry Plum Prune		3 1/s to 4 1/s pts. (2.3 to 3.1)	1 to 1 ³ / ₈ pts. (0.75 to 1.0)	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 Ensign 720 for control of leaf curl may be made at any time prior to budswell the following spring. Where Coryneum blight (shothole) occurs, also apply at budbreak to protect newly emerging leaves and at shuck split to prevent fruit infections.	
	Lacy (russet) scab (plum/prune)	3 1/8 to 4 1/8 pts. (2.3 to 3.1)	1 to 1 ³ /8 pts. (0.75 to 1.0)	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.	
	Cherry leaf spot Peach, Nectarine, Apricot scab Black knot (cherry, plum)	3 1/8 to 4 1/8 pts. (2.3 to 3.1)	1 to 1 3/8 pts. (0.75 to 1.0)	In addition to the bloom application listed above, make one application at shuck split. DO NOT apply Ensign 720 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 10-14 days later.	

DO NOT apply more than 20.5 pints Ensign 720 (15.4 lbs. Al) per acre during each growing season. The minimum re-treatment interval is 10 days.

		Ensign 720 Rate Pints/acre or 100 gal. (lbs. Al/acre or 100 gal.)			
CROP	DISEASES	ACRE	100 GAL*	APPLICATION DIRECTIONS	
Coniters (Pine, Spruce)	Swiss needlecast	2% to 5½ pts. (2.1 to 4.125)	2% to 5½ pts. (2.1 to 4.125)	Single application technique: In Christmas tree plantations or forest stands, make one application in the spring when new shoot growth is ½ to 2 inches in length.	
	Scleroderris canker (pines) Swiss needlecast	1½ to 2% pts. (1.125 to 2.1)	1½ to 2¾ pts. (1.125 to 2.1)	Make the first application in spring when new shoot growth is 1/2 to 2 inches in length. Make additional applications at 3 to 4	
	Sirococcus tip blight	2 to 3½ pts. (1.5 to 2.6)	2 to 3½ pts. (1.5 to 2.6)	week intervals until conditions no longer favor disease development. For use in nursery beds, apply the highest rate	
	Rhizosphaera needlecast (spruces) Scirrhia brown spot (pines)	5½ pts. (4.125)	5½ pts. (4.125)	specified on a 3-week schedule.	
	Cyclaneusma and Lophodermium needlecasts (pines)	2% to 5% pts. (2.1 to 4.125)	2% to 5½ pts. (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.	
	Rhabdocline needlecast (Douglas fir)	1½ to 2¾ pts. (1.125 to 2.1)	1½ to 2¾ pts. (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.	
	Botrytis seedling blight Phoma twig blight	1½ to 2¾ pts. (1.125 to 2.1)	1½ to 2¾ pts. (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.	
	Autoecious needle rust (Weir's cushion) (spruce)	5½ pts. (4.125)	5½ pts. (4.125)	Begin applications when 10% of buds have broken and twice thereafter at 7-10 day intervals.	

DO NOT apply more than 22 pints Ensign 720 (16.5 lbs. Al) per acre during each growing season. The minimum re-treatment interval for established trees is 21 days. The minimum re-treatment interval in nursery beds is 7 days.

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

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

PLASTIC CONTAINERS: Triple rinse (or equivalent), and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or by alternative methods allowed by state and local authorities.

RETURNABLE REFILLABLE CONTAINERS: If Ensign 720 is packaged in a returnable refillable container, then, after use, do not rinse container. The contents of this container cannot be completely removed by cleaning. Return container intact to point of purchase.

This container must only be refilled with Ensign 720. Refilling with materials other than Ensign 720 will result in contamination and may weaken container. DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE. Before refilling, inspect thoroughly for damage such as cracks, punctures, abrasions, and damaged or worn threads on closure devices. Check for leaks after refilling and before transport. Do not refill or transport a damaged or leaking container.

BULK AND MINIBULK CONTAINERS: Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer's instructions.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER. For help with any spill, leak, fire or exposure involving this material call day or night CHEMTREC 1-800-301-7976.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVE-LAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Grop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL, THIS PRODUCT IS SOLD AS IS TO THE EXTENT ALLOWED BY APPLICABLE LAW LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL, BUYER OR USER MUST SEND, TO THE EXTENT REQUIRED BY APPLICABLE LAW, WRITTEN NOTICE OF SUCH CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, 7251 WEST 4TH STREET, GREELEY, CO 80634.

TO THE EXTENT ALLOWED BY APPLICABLE LAW, THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT, INCLUDING BUT NOT LIMITED TO CLAIMS OF BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, STRICT LIABILITY, OR OTHER TORTS, SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. TO THE EXTENT ALLOWED BY APPLICABLE LAW, LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Ensign® is a registered trademark of United Agri Products, Inc..

Dipel® is a registered trademark of Valent BioSciences Corporation.

Latron B-1956® and Latron AG-98® are trademarks of Dow AgroSciences LLC.

FORMULATED FOR

