Initiate 720 Flowable Fungicide

Registrant: Loveland Products, Inc.

GENERAL

EPA Registration Number:	34704-881	**Signal Word:**	CAUTION
CA Registration Number:	34704-881-ZB		
Active Ingredient:	54 - Chlorothalonil (tetrachloroisophthalonitrile)	**Application Methods:**	Air, Chemigation, Ground
Label Version:	050814 V2D 08R16	**Mode of Action:**	FRAC M05
Physical State:	Liquid (11.43 lb / ga)	**Toxic To:**	Aquatic Invertebrates, Aquatic Organisms, Wildlife
Product Type:	Fungicide	**Rainfastness:**	
Formulation Type:	Liquid (Flowable)		

ADDITIONAL INFORMATION

Federally Restricted:	No		
Organic Certifications:	None	**Other Certifications:**	None
Posting Required:	No	**Closed Mixing System Required:**	All applications in All States/Provinces: Not required
Oral Notification Required:	No	**Avoid Grazing:**	See Label

CALIFORNIA

Registration #:	34704-881-ZB	**CA Restricted:**	No
CA NOI Required:	No		

REGISTERED FOR USE IN

PACKAGE TYPES

2.5 GA Package(s) (2 / Case)	260 GA Package(s)

**Specific Notices will not be shown until a pest is selected.

SAFETY

PPE Information:	Personal Protective Equipment (PPE) Some of the materials that are chemical-resistant to this product are listed below. 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 Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. A dust/mist-filtering respirator must be worn if the mixer/loader/applicator uses a high-pressure, hand wand sprayer.
Re-Entry PPE Information:	PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants soil, or water is: - Coveralls, - Chemical resistant gloves made of any waterproof material, - Shoes plus socks and - Protective eyewear. Special Eye Irritation Provisions: Chlorothalonil in this product is a severe eye irritant. Although the restricted entry interval expires after 12 hours for the next 6.5 days entry is permitted only when the following safety measures are provided: 1. At least one container designed specifically for flushing eyes must be available in operating condition at the WPS required decontamination site intended for workers entering the treated area. 2. Workers must be informed, in a manner they can understand: - that residues in the treated area may be highly irritating to their eyes - that they should take precautions such as refraining from rubbing their eyes to keep the residues out of their eyes - that if they do get residues in their eyes they should immediately flush their eyes using the eyeflush container that is located at the decontamination site or using other readily available clean water - how to operate the eyeflush container
Transport Information:	TRANSPORT INFORMATION Note: 120 GALLONS AND GREATER: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CHLOROTHALONIL) DOT UN/ID no UN3082 Proper shipping name LESS THAN 119 GALLONS: NOT REGULATED U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60) Hazard Class 9 Packing Group III Emergency Response Guide Number 171
Response Number:	800-424-9300
Medical Number:	866-944-8565
SDS Hazard ID Signal Word:	Danger

GENERAL NOTICE 1

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. 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.

GENERAL NOTICE 2

PRODUCT INFORMATION Initiate 720 Flowable Fungicide is an excellent disease control agent when used according to label directions for control of a broad spectrum of plant diseases. Initiate 720 Flowable Fungicide is recommended for use in programs which 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. Initiate 720 Flowable Fungicide is effective for strategic use in programs that attempt to minimize disease resistance to fungicides. Some other fungicides which are at risk from disease resistance exhibit a single-site mode of fungicidal action Initiate 720 Flowable Fungicide with a multi-site mode of action, may be used to delay or prevent the development of resistance to single-site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of Initiate 720 Flowable Fungicide in programs which seek to minimize the occurrence of disease resistance to other fungicides. Initiate 720 Flowable Fungicide can be used effectively in dilute or concentrate sprays. Thorough uniform coverage is essential for disease control. Precautions and Restrictions DO NOT use on greenhouse-grown crops except as directed in the ORNAMENTAL PLANTS section of this label. Do not apply when wind speed favors drift beyond the target area. Observe all spray drift precautions for ground, aerial, and chemigation applications. Do not combine Initiate 720 Flowable Fungicide in spray tank with pesticides, surfactants or fertilizers, unless your prior use has shown the combination physically compatible, effective and noninjurous under your conditions of use. Do not combine Initiate 720 Flowable Fungicide with Dipel(R) Latron B-1956(R) or Latron AG-98(R) as phytotoxicity may result from the combination when applied to the crops on this label. 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.

GENERAL NOTICE 3

Spray Drift Precautions Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off target drift movement from aerial applications to agricultural field crops. These requirements do not apply to conifer applications, public health uses or applications using dry formulations. 1. The distance of the outer most nozzles on the boom must not exceed 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 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.

GENERAL NOTICE 4

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 ft above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind. Swath Adjustment When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.). Wind Drift potential is lowest between wind speeds of 2-10 mph. However many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. 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).

GENERAL NOTICE 5

Application and Calibration Techniques for Chemigation Apply this product only through center pivot, motorized lateral move, traveling gun, solid set and portable (wheel move side roll, end tow, or hand move) irrigation system(s). Do not apply this product through any other type of irrigation system. Crop injury lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not apply this product through irrigation systems connected to a public water system. "Public water system" means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. Controls for both irrigation water and pesticide injection systems must be functionally interlocked, so as to automatically terminate pesticide injection when the irrigation water pump motor stops. A person knowledgeable of the irrigation system and responsible for its operation shall be present so as to discontinue pesticide injection and make necessary adjustments, should the need arise. The irrigation water pipeline must be fitted with a functional automatic, quick-closing check valve to prevent the flow of treated irrigation water back toward the water source. The pipeline must also be fitted with a vacuum relief valve and low pressure drain located between the irrigation water pump and the check valve, to prevent back-siphoning of treated irrigation water into the water source Always inject Initiate 720 Flowable Fungicide 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. Initiate 720 Flowable Fungicide 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 to 3 times those encountered within the irrigation water line. Venturi applicator units cannot be used on these systems. Fill chemical supply tank of injection equipment with water. Operate system for one complete revolution or run across the field, measuring time required, amount of water injected, and acreage covered. Thoroughly mix recommended amount of Initiate 720 Flowable Fungicide for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run. Mixture in the chemical supply tank must be continuously agitated during the injection run. Shut off injection equipment after one revolution or run, but continue to operate irrigation system until Initiate 720 Flowable Fungicide 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 30 to 45 minute period. Mix desired amount of Initiate 720 Flowable Fungicide for acreage to be covered with water so that the total mixture of Initiate 720 Flowable Fungicide 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 Initiate 720 Flowable Fungicide 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 Initiate 720 Flowable Fungicide has been cleared from last sprinkler head.

GENERAL NOTICE 6

APPLICATION Dosage rates on this label indicate pints of Initiate 720 Flowable Fungicide per acre unless otherwise stated. Under conditions favoring disease development the highest rate specified and shortest application interval should be used. NOTE: Slowly invert container several times to assure uniform mixture. The required amount of Initiate 720 Flowable Fungicide should be added slowly into the spray tank during filling. With concentrate sprays, pre-mix the required amount of Initiate 720 Flowable Fungicide in a clean container and add to the spray tank as it is being filled. Keep agitator running when filling spray tank and during spray operations. Apply Initiate 720 Flowable Fungicide in sufficient water to obtain adequate coverage of foliage. Gallonage to be used will vary with crop and amount of plant growth. For field and row crops spray volume usually will range from 20 to 150 gallons per acre for dilute sprays and 5 to 10 gallons per acre for concentrate ground sprays and aircraft applications. For tree and orchard crops apply Initiate 720 Flowable Fungicide in sufficient water and with proper calibration to obtain uniform coverage of tree canopy. For fruit and nut bearing crops the maximum volume is 300 gallons per acre unless indicated otherwise in the specific use directions. For conifers the maximum volume is 100 gallons per acre.