

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

November 13, 2023

William Washburn Registration Manager Helena Agri-Enterprises, LLC 225 Schilling Boulevard, Suite 300 Collierville, TN 38017

> Subject: Label Amendment – Label changes based on the 2022 National Marine Fisheries Service Biological Opinion on Diazinon and Organophosphate Early Mitigation Plan for Diazinon Product Name: Diazinon AG 500 EPA Registration Number: 5905-248 Application Date: May 25, 2023 Decision Numbers: 592086, 594581

Dear William Washburn:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the Registration Review of the above referenced product in connection with the Diazinon 2022 Biological Opinion, as well as the organophosphate early mitigation plan for diazinon. The Agency has concluded that your submission is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved by the Agency. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 12 months from the date of this letter. After 12 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR § 152.3.

Should you wish to add/retain a reference to the company's website on your label, please be aware that the website becomes labeling under FIFRA and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those Page 2 of 2 EPA Reg. No. 5905-248 Decision Nos. 592086, 594581

claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

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

If you have any questions, please contact Alex McKee at 202-566-1939 or at <u>mckee.alex@epa.gov</u>.

Sincerely,

Dana Liudman

Dana L. Friedman, Chief Risk Management and Implementation Branch 1 Pesticide Re-Evaluation Division Office of Pesticide Programs U.S. Environmental Protection Agency

Enclosure

CC: Tamica Cain, Registration Division, PM10

RESTRICTED USE PESTICIDE DUE TO AVIAN AND AQUATIC TOXICITY

FOR RETAIL SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION.

DIAZINON GROUP 1B INSECTICIDE

DIAZINON AG500 Insecticide

For control of certain insects on fruits, nuts, vegetables, and ornamentals grown outdoo	rs in nurseries
ACTIVE INGREDIENT: Diazinon:	% BY WT.
O,O-diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) phosphorothioate	
INERT INGREDIENTS*	
	TOTAL 100.0%

Contains 4 lbs. diazinon per gallon *Contains xylene range aromatic solvent.

KEEP OUT OF REACH OF CHILDREN CAUTION

		FIRST AID
		Contains an organophosphate that inhibits cholinesterase
IF ON SKIN OR	•	Take off contaminated clothing.
CLOTHING:	•	Rinse skin immediately with plenty of water for 15-20 minutes.
	•	Call a poison control center or doctor for treatment advice.
IF IN EYES:	•	Hold eye open and rinse slowly and gently with water for 15-20 minutes.
	•	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	•	Call a poison control center or doctor for treatment advice.
IF	•	Call a poison control center or doctor immediately for treatment advice.
SWALLOWED:	•	Do not induce vomiting unless told to by a poison control center or doctor.
	•	Do not give any liquid to the person.
	•	Do not give anything by mouth to an unconscious or convulsing person.
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.
		ntainer or label with you when calling a poison control center or doctor or going for treatment. You may also
		C at 1-800-424-9300 for emergency medical treatment information.
		N: This product is an organophosphate insecticide. If symptoms of cholinesterase inhibition are present,
		jection is antidotal. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine. This
		roleum distillates (xylene range aromatic solvent) which may pose an aspiration hazard. Vomiting may cause
aspiration pneum	nonia	a. Gastric lavage may be indicated if product was taken internally.

EPA Reg. No. 5905-248 AD 041316 EPA Est. No. First letters of product batch code indicate producing establishment: 5905-GA-1=CG, 5905-AR-1=WA, 5905-CA-1=KC, 5905-IA-1=DI

NET CONTENTS: _____ GALLON(S)

MANUFACTURED FOR HELENA AGRI-ENTERPRISES, LLC. 225 SCHILLING BOULEVARD, SUITE 300 COLLIERVILLE, TN 38017



ACCEPTED

Nov 13, 2023

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. FOOF 240

^{Reg. No.} 5905-248

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, inhaled, or absorbed through skin. Causes moderate eye injury. Avoid contact with eyes, skin, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contamination of food and feed. Food utensils such as tablespoons and measuring cups should not be used for food purposes after use in measuring pesticides. Keep out of reach of domestic animals. Do not use on humans, household pets, or livestock. Do not contaminate ornamental fish ponds.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Mixers, loaders, applicators, and other handlers using engineering controls must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves, such as barrier laminate, butyl or nitrile rubber ≥ 14 mils, or Viton ≥ 14 mils if mixing or loading
- Chemical resistant apron if mixing or loading

See engineering controls for additional requirements.

Handlers performing tasks, such as cleaning equipment or spill clean-up for which engineering controls are not feasible must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves, such as barrier laminate, butyl or nitrile rubber \ge 14 mils, or Viton \ge 14 mils
- Chemical resistant footwear plus socks
- Chemical resistant apron if exposed to the concentrate
- Goggles, face shield, or safety glasses
- <u>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 an organic vapor (OV) cartridge or canister with any R, or P, or HE prefilter.</u>

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. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

Mixers and loaders must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides that provides dermal and inhalation protection [40 CFR 170.240 (d)(4)], and must:

- wear the personal protective equipment required for mixers/loaders using engineering controls;
- wear protective eyewear if the system operates under pressure; and
- be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, chemical resistant footwear and the respirator specified in the PPE section of this labeling for handlers not using engineering controls.

Applicators using motorized ground equipment applications to lettuce must use an enclosed cab that meets the definition in the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240 (d)(5)] for dermal protection. In addition, applicators must:

- wear the personal protective equipment required in the PPE section of this labeling for handlers using engineering controls;
- *either* wear the respirator specified for handlers not using engineering controls *or* use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as the respirator specified for handlers not using engineering controls;

- be provided and have immediately available for use in an emergency when they must exit the cab in the treated area, coveralls, chemical resistant footwear, and, if not already using one, the respirator specified for handlers not using engineering controls;
- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

Exception: For application to lettuce, see directions for use for a special exception to these engineering controls requirements.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

When entering or leaving an aircraft contaminated with pesticide residues, pilots must wear chemical resistant gloves and must store used gloves in a chemical resistant container, such as a plastic bag, to prevent contamination of the inside of the cockpit.

Users should:

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

This product is highly toxic to birds, fish, and other wildlife. Birds, especially waterfowl, feeding or drinking on treated areas may be killed. Do not exceed maximum permitted label rates. Rates above those recommended significantly increase potential hazards to birds, especially waterfowl. Keep out of lakes, streams, ponds, tidal marshes, and estuaries. 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. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where fish, shrimp, crab, and other aquatic life are important resources. Do not contaminate water by cleaning of equipment or disposal of equipment washwater. This pesticide is highly toxic to bees exposed to direct treatment or to residues on blooming crops or weeds. Do not apply this pesticide or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. Protect pollinating insects by following label directions intended to minimize drift and to reduce risk to these organisms.

Following best management practices can help reduce risk to terrestrial pollinators. Examples of best management practices include applying pesticides in the evening and at night when pollinators are not foraging and checking to confirm hive locations before spraying. For additional resources on pollinator best management practices, visit https://www.epa.gov/pollinator-protection/find-best management-practices-protect-pollinators.

Managed pollinator protection plans are developed by states/tribes to promote communication between growers, landowners, farmers, beekeepers, pesticide users, and other pest management professionals to reduce exposure of bees to pesticides. If available, visit state plans for additional information on how to protect pollinators.

How to Report Bee Kills

It is recommended that users contact both the state lead agency and the U.S. Environmental Protection Agency to report bee kills due to pesticide application. Bee kills can be reported to EPA at beekill@epa.gov. To contact your state lead agency, see the current listing of state pesticide regulatory agencies at the National Pesticide Information Center's website: http://npic.orst.edu/reg/state_agencies.html."

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Do not use, pour, spill, or store near heat or open flame.

DIRECTIONS FOR USE RESTRICTED USE PESTICIDE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Reformulation or repackaging of this product is prohibited.

Do not apply this product in a way that will contact workers or other persons, 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.

Buffer Restrictions

- Airblast: 75 ft. from field edge (no droplet restriction)
- **Groundboom:** 75 ft. from field edge (requiring medium or larger droplets)

Do not apply within 75 feet of a residential or institutional area. Residential and institutional areas are areas frequented by adults and children for living, educational, recreational activities, or for hospice/care and include areas such as schools, homes, farmworker housing, daycare centers, nursing homes, hospitals, playgrounds, parks, recreational areas, athletic fields, residential lawns, pedestrian sidewalks, and gardens. Non-residential agricultural buildings, including barns, livestock facilities, sheds, and outhouses are not included in this prohibition.

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 worker entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with each crop. Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 worn over long sleeve shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear if overhead exposures

Notify workers of the application by warning them orally and by posting warning signs at entrance to treated areas.

Endangered Species Protection Requirements:

It is a Federal offense to use any pesticide in a manner that results in an unauthorized "take" (e.g., kill or otherwise harm) of an endangered species and certain threatened species under the Endangered Species Act section 9. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. You must obtain a Bulletin no earlier than six months before using this product. To obtain Bulletins, consult http://www.epa.gov/espp/, call 1-844-447-3813, or email ESPP@epa.gov. You must use the Bulletin valid for the month in which you will apply the product.

Reporting Ecological Incidents: To report ecological incidents, including mortality, injury, or harm to plants and animals, call 1-800-424-9300.

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, **DIAZINON AG 500** contains a Group 1B insecticide. Any insect population may contain individuals naturally resistant to **DIAZINON AG 500** and other Group 1B insecticides. The resistant individuals may dominate the insect

population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance, take the following steps:

• Rotate the use of **DIAZINON AG 500** or other Group 1B insecticides within a growing season, or among growing seasons, with different groups that control the same pests.

• Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. Do not rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following Page 11 of 18 recommendations provided by the Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they
 are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known cross-resistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.

• Adopt an integrated pest management program for insecticide use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.

• Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.

• Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.

• For further information or to report suspected resistance contact Helena Agri-Enterprises, LLC at 901-761-0050 or at www.helenaagri.com .

MANDATORY SPRAY DRIFT MANAGEMENT

Airblast Applications:

- Sprays must be directed into the canopy.
- Do not apply when wind speeds exceed 10 mph at the application site.
- User must turn off outward pointing nozzles at row ends and when spraying outer row.
- Do not apply during temperature inversions.

Ground Boom Applications:

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the ground or crop canopy.
- Applicators are required to use a Medium or coarser droplet size (ASABE S572).
- Do not apply when wind speeds exceed 15 mph at the application site.
- Do not apply during temperature inversions.

Boomless Ground Applications:

- Applicators are required to select nozzle and pressure that deliver a Medium or coarser droplet size (ASABE S572) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

SPRAY DRIFT ADVISORIES

Handheld Technology Applications: Take precautions to minimize spray drift.

WORK SAFETY RULES

Repeated exposures to cholinesterase inhibitors such as are contained in this product may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. When handling Diazinon AG500, do not rub eyes or mouth with hands. If you feel sick in any way, STOP work and get help right away. See **FIRST AID** section of this label. When handling this product, wear the personal protective equipment listed on this label.

GENERAL INFORMATION

Diazinon AG500 is an emulsifiable solution which, when diluted with water according to the directions, is intended for the control of insect pests of agricultural crops and other plants. Do not use in greenhouses. Do not use in barns or dwellings. Do not use on livestock. Aerial application is prohibited.

In the directions for use which follow, best control is obtained when application is made when infestation is noticed.

To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, since crop or plant injury may result.

Do not use water from treated cranberry beds for drinking purposes or to irrigate crops other than those appearing on EPA-approved diazinon labels.

Note: The California Department of Pesticide Regulation has set a 5-day reentry period for diazinon on peaches and nectarines. Five days should elapse between the time of application and the time a worker may enter the field to engage in any activity requiring substantial contact with treated foliage. When a mixture of two or more organophosphate pesticides are applied in combination, the interval should be prolonged by adding to the largest applicable interval an additional 50% of that interval.

Failure to follow the directions for use and precautions on this label may result in poor insect control, crop injury, or illegal residues.

VEGETATIVE FILTER STRIPS

Construct and maintain a vegetative filter strip, according to the width specified below, of grass or other permanent vegetation between the field edge and nearby down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing Diazinon onto fields where a maintained vegetative filter strip of at least 25 feet exists between the field edge and where a down gradient aquatic habitat exists. This minimum required width of 25 feet may be reduced or removed under the following conditions:

– For Western irrigated agriculture, a maintained vegetative filter strip of at least 10 feet wide is required. Western irrigated agriculture is defined as irrigated farmland in the following states: WA, OR, CA, ID, NV, UT, AZ, MT, WY, CO, NM, and TX (west of I-35).

• For Western irrigated agriculture, if a sediment control basin is present, a vegetative filter strip is not required.

- In all other areas, a vegetative filter strip with a minimum width of 25 feet is required, unless the following conditions are met. The vegetative filter strip requirement may be reduced from 25 feet to 15 feet if at least one of the following applies:

- The area of application is considered prime farmland (as defined in 7 CFR § 657.5).
- Conservation tillage is being implemented on the area of application. Conservation tillage is defined as any system that leaves at least 30% of the soil surface covered by residue after planting. Conservation tillage practices can include mulch-till, no-till, or strip-till.
- A functional terrace system is maintained on the area of application.
- Water and sediment control basins for the area of application are functional and maintained.
- The area of application is less than or equal to 10 acres. For further guidance on vegetated filter strips, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. https://www.regulations.gov/document?D=EPA-HQ-OPP-2008-0331-0175

CHEMIGATION STATEMENT

APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION

Diazinon AG500 may be applied alone or in combination with other pesticides registered for application through irrigation systems. Apply this product only through sprinkler, including center pivot, lateral move, end tow side (wheel) roll, traveler, big gun, solid set, or hand move, flood (basin) furrow, border, or drip (including surface and subsurface) irrigation systems. Do not apply this product through any other type of irrigation system.

Diazinon is physically compatible with most insecticide and fungicide products; if you are not certain of the physical compatibility of Diazinon AG500 with other tank mix partners, please contact your local Helena Agri-Enterprises, LLC sales representative. Note: Do not mix Diazinon AG500 with any formulation of captan or Captec® because crop injury may occur.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts.

Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Mix in clean supply tank the recommended amount of this product for acreage to be covered, and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants or fertilizers unless prior use has shown the combination noninjurious under your conditions of use. Follow precautionary statements and directions for all tank-mix products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated. Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

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

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Note: Helena Agri-Enterprises, LLC does not encourage connecting chemigation systems to public water supplies. The following information is provided for users who have diligently considered all other application and water supply options before electing to make such a connection.

Public water systems 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 a least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from a point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

SPRINKLER CHEMIGATION

- 1. 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.
- 2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3. The pesticide injection pipeline must also contain 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.
- 4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5. 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.
- 6. 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.
- 7. Do not apply when wind speed favors drift beyond the area intended for treatment.

OPERATING INSTRUCTIONS

- 1. Determine the acreage to be treated by the sprinkler system.
- 2. Measure the appropriate amount of Diazinon AG500 needed to treat the acreage to be treated. Refer to the specific directions for use for the application rate and the amount of water per acre.
- 3. Add the pre-measured Diazinon AG500 to the chemigation system supply tank and dilute with water if needed. Proper agitation is needed if Diazinon AG500 is tank mixed with other pesticides registered for sprinkler chemigation application.
- 4. Start the irrigation system and bring the system up to full pressure, making certain that all sprinkler heads are functioning properly.
- 5. Engage the chemigation injection or venturi system to add the diazinon to the irrigation lines.
- 6. Continue to run irrigation system for a few minutes after supply tank is empty to allow material in the irrigation lines to reach the sprinkler heads furthest from the chemigation injection point.

FLOOD (BASIN) FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a) 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.
- b) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- c) 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.
- d) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e) 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.
- f) 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.

DRIP (INCLUDING SURFACE AND SUBSURFACE) CHEMIGATION (SOIL DRENCH USES)

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 pipe 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.

SPRAY EQUIPMENT

Applications of Diazinon AG500 using sufficient water volume to provide thorough and uniform coverage generally provide the most effective pest control.

To avoid spray drift, do not apply when conditions favor drift from beyond the target area. Avoid overlap because crop injury may occur.

Equip sprayers with nozzles that provide accurate and uniform application. Be certain that nozzles are the same size and uniformly spaced across the boom. Calibrate sprayer before use.

For more information on spray equipment and calibration, consult sprayer manufacturer's and state recommendations. For specific local directions and spray schedules, consult your local or state agricultural authorities.

Ground Application Restrictions

- **Do not** apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).
- **Do not** apply within 65ft (20 meters) of aquatic habitats for applications with rates ≥ 1.5lbs/acre when wind is blowing towards aquatic habitats.

MIXING PROCEDURES

Thoroughly clean spray equipment before using this product. Prepare only the amount of spray mixture needed for the immediate application. Vigorous agitation is necessary for proper dispersal of this product. Maintain maximum agitation throughout the spraying operation. Do not let the spray mixture stand in the spray tank overnight. Flush the spray equipment thoroughly following each use.

1. Diazinon AG500 Alone:

Add ½ of the required amount of water to the mix tank. With the agitator running, add the Diazinon AG500 to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after the Diazinon AG500 has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

2. Diazinon AG500 in Tank-Mixtures:

Note: Do not mix Diazinon AG500 with any formulation of Captan or Captec® because crop injury may occur.

Diazinon is physically compatible with most insecticide and fungicide products; if you are not certain of the physical compatibility of Diazinon AG500 with other tank mix partners, please contact your local Helena Agri-Enterprises, LLC sales representative. When using Diazinon AG500 in tank mixtures, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank mix products' labels. Confirm that the tank mixture is safe to the crop by spraying a small area first, and evaluating crop safety after an appropriate period. Do not treat larger areas until crop safety has been confirmed.

Add ½ of the required amount of water to the mix tank. Start the agitator running before adding any tank-mix partners. Add tank-mix partners in this order: all products in water-soluble packaging, wettable powders, wettable granules (dry flowables), liquid flowables, liquids, and emulsifiable concentrates. Always allow each tank-mix partner to fully disperse before adding the next product. Maintain sufficient agitation while adding the remainder of the water and until all of the mixture has been applied.

FRUIT AND NUT CROPS

Diazinon AG500 may be applied using ground application equipment as specified in the following table. This table indicates the *minimum* amount of water that can be used for application. The rate of Diazinon AG500 for concentrated spray applied to fruit trees by ground equipment is based on a dilute full cover spray applied with conventional ground equipment at a rate of 300 - 400 gals. of water per acre. The specific amount of product to be used appears under the separate directions for use for each crop. If the rate calls for 1 pt. of Diazinon AG500 in 100 gals. of water, this amounts to 3 - 4 pts. of product per acre when applied at the usual dilute ground spray volumes of 300 - 400 gals. of water per acre. In no case should the amount of product used per acre exceed the maximum amount per acre per application that is specified in the **COMMENTS** section for individual crops.

Note: To protect bees, do not apply this product to fruit trees when trees or substantial numbers of weeds in the orchard are in bloom.

Diazinon AG500 may be used during dormancy on deciduous trees and vines. When mixing with spray oils, follow oil manufacturer's use directions.

CROP		APPLICATION GALS./ACRE
	Dilute	Concentrate
Almonds*	100	20
Apricots	100	20
Blackberries**	100	20
Blueberries	100	20
Boysenberries**	100	20
Caneberries****	100	20
Cherries	100	20
Cranberries	15	-
Dewberries**	100	20
Figs*	100	20
Filberts***	250	20
Loganberries**	100	20
Nectarines	100	20
Peaches	100	20
Plums	100	20
Prunes	100	20
Raspberries**	100	20
Strawberries	100 20	

*CA Only

**CA, OR, WA Only

***OR, WA Only

****CA, OH, OR, WA Only

	FRUIT AND I	NUT CROPS		
CROP	PEST	RATE	COMMENTS	
ALMONDS (California Only)	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borers, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs	1 to 1.5 pints (0.5 – 0.75 lbs. a.i.) per 100 gals. water	Apply in 100 gals. water plus 2 - 3 gals. dormant oil or 1-1½ gals. superior type oil. Apply during the dormant season only.	
	Do not apply more than 3 lbMake a maximum of one apply	o not apply more than 6 pts. (3 lbs. a.i.) of product or 9 gals oil per acre. o not apply more than 3 lbs. a.i. per acre per year. ake a maximum of one application per year during the dormant season only. oply every other year unless pest infestations can be controlled only with cons unual treatments.		
APRICOTS	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs	1 pt. (0.5 lbs. a.i.) per 100 gals. water	Apply as a dormant spray only once per year. When using spray oils, follow spray oil manufacturer's use directions.	
	Aphids, Brown Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler	1 pt. (0.5 lbs. a.i.) per 100 gals. water	Apply when infestation is noticed.	
	Apricot Mealybug	1 pt. (0.5 lbs. a.i.) per 100 gals. water	Apply as a cover spray from petal fall to June.	
	Olive Scale Crawler	1⁄2 pt. (0.25 lbs. a.i.) plus 1½ gals. of light medium horticultural oil per 100 gals. water	Apply when crawlers are present.	
	 Do not apply more than 8 p A maximum of two applicati application and 2) a maximut target pest. For in-season applications controlled only with consect 	ts. (4 lbs. a.i.) per ons are allowed p um of one as an in s, apply every ot utive annual treatm en Dormant Applie	er year: 1) a maximum of one as a dormant -season foliar application regardless of her year unless pest infestations can be nents. cation and In-Season Application; 120 Days	

BLUEBERRIES	Cranberry Fruitworm, Cherry Fruitworm, Blueberry Maggot, Aphids, Thrips, Two-spotted Spider Mite	1 pint (0.5 lb. a.i.) per acre per 100 gals. water	Apply when infestation occurs.
	Fire Ants	1 pint (0.5 lb. a.i.) per acre per 100 gals. water	To aid in the control of fire ants, slowly apply 1 gal. of diluted mixture over and 6 inches around each mound. Apply gently to avoid disturbing ants. Use equipment capable of delivering the diluted product as a gentle rain. High pressure sprays may disturb the ants and cause migration, reducing product effectiveness. For best results, apply in cool weather (65 - 80°F) or in early morning or late evening hours.
	 Do not apply more than 4 pt A maximum of two application 	ts. (2 lbs. a.i.) of p ons are allowed p gardless of target p	er year: 1) a maximum of one as an in- pest and 2) a maximum of one for control of
CANEBERRIES (Blackberries, Boysenberries, Dewberries, Loganberries,	Raspberry Fruitworm	1 qts. (1 lbs. a.i.) per acre	Apply when insects occur. Apply in a minimum of 100 gals. of water per acre (200 gals. per acre maximum). Make application when blossom buds separate.
Raspberries) (California, Ohio, Oregon, and Washington Only)	Raspberry Crown Borer (Raspberry Root Borer)	2 qts. (2 lbs. a.i.) per acre	Apply a single application in a minimum of 100 gals. of water per acre as a drench to the crown and lower canes in the spring before buds break.
	Do not apply more than 2 qt	ts. (2 lbs. a.i.) of p	roduct per acre per application. roduct per acre per year. regardless of the target pest.

		4 4	
CHERRIES	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs	1 pt. (0.5 lb. a.i.) per 100 gals. water	Apply as a dormant spray. When using spray oils, follow spray oil manufacturer's use directions. Apply only once during the dormant season.
	Eyespotted Bud Moth, Fruittree Leafroller, Leafhoppers, Black Cherry Aphid, San Jose Scale Crawler	1 pt. (0.5 lb. a.i.) per 100 gals. water	Apply when infestation occurs.
	Cherry Fruit Fly	¹ ⁄₂ - 1 pt. (0.25 – 0.5 lb. a.i.)	Apply when adult flies begin to emerge.
	Cherry Rust Mite	per 100 gals. water	Apply to trees after harvest.
	 Do not apply more than 8 A maximum of two applica application and 2) a maxim target pest. For in-season application controlled only with conserved 	pts. (4 lbs. a.i) of tions are allowed p num of one as an i ns, apply every c cutive annual treat veen Dormant App	ber year: 1) a maximum of one as a dormant n-season foliar application regardless of other year unless pest infestations can be ments. plication and In-Season Application;90 Days
CRANBERRIES	Blackheaded Fireworm (Rhopobota naevana)	2 qts. (2 lbs. a.i.) per acre	Apply to larval stage. Pheromone trap captures and sweep monitoring may be used to optimize treatment timing. Repeat application after 14 days if necessary. A maximum of 3 applications per season is permitted regardless of target pest.
	Cranberry Fruitworm	2 to 3 qts. (2 - 3 lbs. a.i.) per acre	Cranberry growth stage and/or berry inspection for eggs may be used to optimize treatment timing; consult your local extension agent or pest management adviser. Repeat application after 14 days if necessary. A maximum of 3 applications per season is permitted regardless of target pest.
	Cranberry Tipworm	2 qts. (2 lbs. a.i.) per acre	Presence of damage is not an indicator of active infestation. For best results, target early-stage larvae. Repeat application after 14 days if necessary. A maximum of 3 applications per season is permitted regardless of target pest.
	 Do not apply more than 3 Do not apply more than 9 Do not use water from ir 	qts. (3 lbs. a.i.) of t qts. (9 lbs. a.i.) of t rigated or flooded lose appearing on	ear regardless of the target pest. this product per acre per application. product per acre per year d cranberry bed for drinking purposes or to EPA-approved diazinon labels.

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FIGS (California Only)	Vinegar flies - <i>Drosophila</i> spp., Dried fruit beetle	1 pt. (0.5 lb. a.i.) per 100 gals.	Apply 1 pt. per 100 gals. Water not to exceed 100 gallons of spray per acre. Apply when infestation occurs.
	Do not apply more than 1 p	· / ·	•
	 Do not apply more than 0.5 		
	Make a maximum of one ap	plication per yea	ar regardless of target pest.
	 The REI is 4 days. 		
	 The PHI is 21 days. 		
FILBERTS (HAZELNUTS)	Filbert Leafroller, Aphids	1 pt.	Apply as a thorough cover spray in 250 to
(Oregon and Washington		(0.5 lbs. a.i.)	400 gals. of water per acre.
Only)		per acre	
	Do not apply more than 1 p	ot. (0.5 lbs. a.i.) o	f product per acre.
	 Do not apply more than 1 p 	ot. (0.5 lbs. a.i.) p	er acre per year.
	Make a maximum of one a	pplication per yea	ar regardless of target pest.
	The REI is 18 days.		
	The PHI is 21 days.		
NECTARINES	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs Oriental Fruit Moth, Aphids, Brown Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler, Peach Twig Borer	1 pt. (0.5 lb. a.i.) per 100 gals. water	Apply as a dormant spray. When using spray oils, follow spray oil manufacturer's use directions. Apply only once during the dormant season. Apply when infestation occurs. Do not apply more than 4 pts. of product or 4 gals. of summer oil per acre.
	 Do not apply more than 4 lb A maximum of two applicati application and 2) a maximut target pest. For in-season applications controlled only with consect 	os. a.i. per acre p ons are allowed um of one as an s, apply every o utive annual treat	per year: 1) a maximum of one as a dormant in-season foliar application regardless of other year unless pest infestations can be

PEACHES	San Jose Scale, Parlatoria	1 pt.	Apply as a dormant spray. When using		
	Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs	(0.5 lb.ai.) per 100 gals. water	spray oils, follow spray oil manufacturer's use directions. Do not apply more than 4 pts. of product or 6 gals. of oil per acre. Apply only once during the dormant season.		
	Brown Mite (Clover Mite), Two-spotted Spider Mite, Olive Scale Crawler, San Jose Scale Crawler		Apply when infestation occurs.		
	Peach Twig Borer, Parlatoria Scale		Apply when infestation occurs.		
	Oriental Fruit Moth		Apply at 100% petal fall.		
	Leafhoppers		Apply when infestation occurs.		
	White Peach Scale	1 ½ - 2 pts. (0.75 – 1 lb. a.i.) per 100 gals. water	Apply post-harvest timed to coincide with peak crawler and immature scale activity. Do not apply before fruit is harvested.		
	Do not apply more than 4 pts (2 lbs. a.i.) of product per application.				
	 Do not apply more than 8 pts. (4 lbs. a.i.) of product per acre per year. A maximum of two applications are allowed per year: 1) a maximum of one as a dormant application and 2) a maximum of one as an in-season foliar application regardless of target pest. 				
	 For in-season applications controlled only with consect 	utive annual trea en Dormant App	lication and In-Season Application; 120 Days		
PLUMS	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs	1 pt. (0.5 lb. a.i.) per 100 gals. water	Apply as a dormant spray. When using spray oils, follow spray oil manufacturer's use directions. Apply only once during the dormant season.		
	Brown Mite (Clover Mite), European Red Mite, Leafcurl Plum Aphid, Mealy Plum Aphid, Thistle Aphid		Apply when infestation occurs.		
	Leafcurl Plum Aphid, Mealy	½ to 1 pt. per 100 gals. water	Apply when infestation occurs.		
	 Do not apply more than 8 p A maximum of two applicat application and 2) a maxim target pest. For in-season applications controlled only with consect 	ots. (4 lbs. a.i.) of ions are allowed um of one as an s, apply every o utive annual trea en Dormant App	per year: 1) a maximum of one as a dormant in-season foliar application regardless of other year unless pest infestations can be tments. lication and In-Season Application; 120 Days		

PRUNES	San Jose Scale, Parlatoria Scale, Black Scale, Brown Scale, Apricot Scale, European Red Mite eggs, Brown Mite eggs, Twig Borer, Apple Aphid eggs, Black Cherry Aphid eggs, Mealy Plum Aphid eggs, Mealybugs Brown Mite (Clover Mite),	1 pt. (0.5 lb. a.i.) per 100 gals. water	Apply as a dormant spray. When using spray oils, follow spray oil manufacturer's use directions. Apply only once during the dormant season. Apply when infestation occurs.
	European Red Mite		
	Leafcurl Plum Aphid, Mealy Plum Aphid, Thistle Aphid	¹ / ₂ - 1 pt. (0.25 − 0.5 lb a. i.) per 100 gals. water	Apply when infestation occurs.
	Do not apply more than 4 p		product per acre per application.
	 Do not apply more than 8 p A maximum of two applicat application and 2) a maxim target pest. 	ts. (4 lbs. a.i.) of ions are allowed um of one as an	product per acre per year. per year: 1) a maximum of one as a dormant in-season foliar application regardless of
	controlled only with consec	utive annual trea en Dormant App	lication and In-Season Application; 120 Days
STRAWBERRIES	Aphids, Two-spotted Spider Mite,	1 pt. (0.5 lb. a.i.) per 100 gals. water per acre.	Apply when pest occurs.
	Cyclamen Mite	1 qt. (1 lb. a.i.) per 100 gals. water per acre.	Direct spray to the plant crown. Plants should be sufficiently agitated to assure thorough coverage of the foliage.
	Mole Crickets	1 qt. (1 lb. a.i.) per acre	Broadcast in sufficient water to obtain even coverage when insects are present. Apply 1 - 2 days before transplanting and immediately incorporate into the top 1 - 2 inches of soil.
	Strawberry Leafroller	0.75 – 1 pint per 100 gals. water	Apply 200 gallons of spray per acre when blossoms show color.
	Do not apply more than 2 of	ts. (2 lbs. a.i.) of e foliar applicat	ion per crop and a maximum of one soil

VEGETABLE CROPS

For foliar or soil applications, Diazinon AG500 should always be applied as a spray in sufficient water to assure thorough coverage of the foliage or soil. Diazinon AG500 may be applied using ground application equipment as specified in the following table. Aerial application is prohibited. This table indicates the minimum amount of water that can be used for application. The specific amount of product to be used appears under the separate directions for use for each crop.

CROP	GROUND APPLICATION MIN. GPA	MIN. GALS./ 1000 SQ. FT. (GROUND)	
Beans, Succulent	10	2	
Beets, Red (Table)	10	2	
Broccoli	10	2	
Brussels Sprouts	10	2	
Cabbage	10	2	
Cantaloupes	5	1	
Carrots	10	2	
Casaba Melons	5	1	
Cauliflower	10	2	
Collards	10	2	
Crenshaw Melons	5	1	
Endive (Escarole)	10	2	
Ginseng	10	2	
Honeydew Melons	5	1	
Kale	10	2	
Lettuce, Head	10	2	
Lettuce, Leaf	10	2	
Muskmelons	5	1	
Mustard Greens	10	2	
Onions (Bulb and Green)	10	2	
Peas, Succulent	10	2	
Persian Melons	5	1	
Radishes	10	2	
Rutabagas	10	2	
Spinach	10	2	
Tomatoes	10	2	
Watermelons	5	1	

Observe stated time intervals between last application and harvest as well as intervals between and maximum numbers of applications per season. Do not apply in greenhouses.

NOTES: (1) Soil Incorporation: Following application of this product to control vegetable soil insects, immediately incorporate the product into the soil to the recommended depth (see directions for individual crops) using a rotary hoe, cultivator, disk, harrow, or other suitable means. For control of surface cutworms, incorporate 2 - 3 inches; for subterranean cutworms, incorporate 3 - 6 inches. (2) Diazinon will not control organophosphate-resistant leafminers.

VEGETABLE CROPS

	-	TABLE CROPS	,
CROP	PEST	RATE/	COMMENTS
		ACRE	
BEANS, SUCCULENT	Cutworms	2 - 4 qts. (2 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	 Do not make more than 4 Do not apply more than 4 Do not apply more than 4 The REI is 3 days. The PHI is 45 days. 	4 qts. (4 lbs. a.i.)	
BEETS, RED (Table)	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.
	 Do not make more that Do not apply more that The REI is 3 days. 		tion per year regardless of target pest. .) per acre per year.
BROCCOLI, BROCCOLINI	Root Maggots	2-3 qts. (2 - 3 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 3 - 4 inches of soil.
	Cuturere	4 - 8 oz. (0.25-0.5 lbs. ai.) per 50 gals. water	Apply in transplant water as a drench application when 200-300 gals of water are used per acre. Apply recommended rate by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
		n 4 qts (4 lbs. a.i.	tion per year regardless of target pest.) per acre per application. .) per acre per year.

BRUSSELS SPROUTS	Root Maggots	2 - 3 qts. (2 - 3 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 3 - 4 inches of soil.
		4 - 8 oz. (0.25 – 0.5 Ibs. ai.) per 50 gals. water	Apply in transplant water as a drench application when 200-300 gals of water are used per acre. Apply recommended rate by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
		an 4 qts. (4 lbs. a.i	tion per year regardless of target pest. .) per acre per application. .) per acre per year.
CABBAGE	Root Maggots	2 - 3 qts. (2 - 3 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 3 - 4 inches of soil.
		4 - 8 oz. (0.25 – 0.5 Ibs. ai.) per 50 gals. water	Apply in transplant water as a drench application when 200-300 gals of water are used per acre. Apply recommended rate by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.
	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
		an 4 qts. (4 lbs. a.i	tion per year regardless of target pest. .) per acre per application. .) per acre per year.
CARROTS	Cutworms	<u>4 qts.</u> (4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.
	Mole Crickets	<u>1 qt.</u> (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.
	Wireworms	<u>3 - 4 qts.</u> (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.
	Do not apply more that	an 4 qts. (4 lbs. a.i	tion per year regardless of target pest. .) per acre per year. .) per acre per application.

CAULIFLOWER, BROCCOFLOWER	Root Maggots	2 - 3 qts. (2 - 3 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 3-4 inches of soil.	
		4 - 8 oz. (0.25 – 0.5 lbs. ai.) per 50 gals. water	Apply in transplant water as a drench application when 200-300 gals of water are used per acre. Apply recommended rate by tractor mounted sprayer equipped with drop nozzles to direct spray to the base of the plant. Note: Transplant water treatments may result in stand reduction due to plant stress at time of transplanting.	
	Cutworms	2 - 4 qts. (2 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.	
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. The REI is 4 days. 			
COLLARDS	Cutworms	4 qts. (4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.	
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. Do not apply more than 4 qts (4 lbs. a.i.) per acre per application. The REI is 4 days. 			
ENDIVE (Escarole)	Cutworms	1 qts. (1 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.	
	Wireworms	1 qts. (1 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 2 pts. (1 lbs. a.i.) per acre per year. Do not apply more than 2 pts. (1 lbs. a.i.) per acre per application. The REI is 4 days. 			

GINSENG	Leafhoppers, Aphids, Lygus Bugs, Flea Beetles, Jumping Plant Lice	¾ - 1 pint	Spray when insects first appear. For heavy insect infestations, use 1 pt. per acre. Apply by ground equipment using 10-100 gals. of water per acre.	
	 Do not apply more than one application per year. Do not apply during flowering of three- or four-year old crops. Do not apply more than 1 pint (0.5 lb. a.i.) per acre per year. Do not apply more than 1 pint (0.5 lb. a.i.) per acre per application Do not graze treated areas or feed treated forage to livestock. The PHI is 30 days The REI is 3 days. 			
KALE	Cutworms	2-4 qts. (2-4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1-2 inches of soil.	
	Wireworms	3-4 qts. (3-4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4-8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. The REI is 4 days. 			
LETTUCE (Head and Leaf)	Cutworms	2 qts. (2 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.	
	Wireworms	2 qts. (2 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.	
	Aphids, Dipterous Leafminer	1 pt. (0.5 lb. a.i.)	Apply when insects occur.	
	 Do not make more than one soil application per crop regardless of target pest. Do not make more than one foliar application per crop regardless of target pest. Do not apply more than 2 qts. (2 lbs. a.i.) per acre per application. Allow at least 30 days between applications. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. 			
	 EXCEPTION: Applicators applying to lettuce are permitted to use open-cab equipment provided they are wearing chemical-resistant headgear AND the personal protective equipment specified in this labeling for handlers not using engineering controls. The PHI is 14 days. The REI is 3 days. 			
MELONS (Cantaloupes, Casabas, Crenshaws, Muskmelons, Persians and hybrids of these) and WATERMELONS	Cutworms	2 - 4 qts (2 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Wireworms	3 - 4 qts (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. The PHI is 3 days. The REI is 3 days. 			

HONEYDEW MELONS	Aphids, Dipterous	1⁄2 - 11⁄2 pt.	Apply when infestation occurs.	
	Leafminer, Thrips, Striped Cucumber Beetle,	(0.25 – 0.75 lb. a.i.)		
	Melonworms,	a.i. <i>)</i>		
	Leafhoppers, Spider Mites			
		n one soil and one	e foliar application per year regardless of target	
	 Do not make more than one soil and one foliar application per year regardless of target pest. For soil application, do not apply more than 8 pts (4 lbs. a.i.) of this product per acre per year. Do not apply more than 8 pts (4 lbs. a.i.) of this product per acre per application. For foliar application, do not apply more than 1.6 pints (0.8 lb. a.i.) of this product per acre per application. Do not apply more than 1.6 pints (0.8 lb. a.i.) of this product per acre per year. Minimum retreatment interval is 30 days. The REI is 3 days. 			
	The PHI is 3 days.			
MUSTARD GREENS	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.	
	Mole Crickets	1 qt. (1 lb a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.	
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. 			
	The REI is 4 days.	,		
ONIONS (Bulb and Green), GARLIC, LEEKS, SPRING ONIONS OR SCALLIONS, JAPANESE BUNCHING	Onion Maggots	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and mix into the top 3-4 inches of soil. Note: Diazinon will not control organophosphate-resistant onion maggots.	
ONIONS, GREEN SHALLOTS, GREEN ESCHALOTS	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.).	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.	
	 Do not make more than one soil application per year regardless of target pest. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. The REI is 3 days. 			
RADISHES	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See SOIL INCORPORATION note.	
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.	
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.	
	Do not make more than one soil application per year regardless of target pest.			
	 Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. The REI is 3 days. 			
RUTABAGAS	Cabbage Maggot	2 - 4 qts.	Broadcast just before planting and	
		(2 – 4 lbs. a.i.)	immediately incorporate into the soil to a depth of 4 inches.	
	 Do not make more than one soil application per year. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. 			
	The REI is 4 days.		- por doro por your.	

SPINACH	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.		
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.		
	Do not apply more	 Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. 			
TOMATOES	Cutworms	2 - 4 qts. (2 - 4 lb. a.i.)	Broadcast just before planting and immediately incorporate into the soil. See Soil Incorporation note.		
	Mole Crickets	1 qt. (1 lb. a.i.)	One to two days before planting, broadcast and immediately incorporate into the top 1 - 2 inches of soil.		
	Wireworms	3 - 4 qts. (3 - 4 lbs. a.i.)	Broadcast just before planting and immediately incorporate into the top 4 - 8 inches of soil.		
	Do not apply moreDo not apply more	 Do not apply more than 4 qts. (4 lbs. a.i.) per acre per application. Do not apply more than 4 qts. (4 lbs. a.i.) per acre per year. 			

ORNAMENTAL STATEMENT

Before treating a large number of ornamental plants with Diazinon AG500 alone or as a tank mixture with any other material, make a test application on a few plants and observe for 7 to 10 days prior to treating large areas to reduce the possibility of plant injury.

CROP	PEST	RATE	
okor	1 201		COMMENTS
			COMMENTS
ARBORVITAE, AZALEA, BIRCH, BOXWOOD, CAMELLIA, CARNATION, CHRYSANTHEMUM, CRABAPPLE, DOGWOOD, DOUGLAS FIR, ELM, EUONYMUS, GLADIOLI, HAWTHORN, HOLLY, HONEY LOCUST, HONEYSUCKLE, JUNIPER, LILAC, LILY, LOCUST, MAPLE, MARIGOLD, OAK, PANSY, PETUNIA, PINE, ORNAMENTAL PLUM, POPLAR, RHODODENDRON, ROSE, SCOTCH PINE, SPIREA, SPRUCE, SYCAMORE,	Aphids, Bagworms, Carnation Bud Mite, Carnation Shoot Mite, Clover Mite, Cyclamen Mite, Dipterous Leafminer, European Pine Shoot Moth, European Red Mite, Flea Beetles, Holly Bud Moth, Leafhoppers, Obscure Root Weevil, Omnivorous Leaftier, Privet Mite, Scale Crawlers (Cottony-cushion, Lecanium, Pine Needle, San Jose, Soft), Thrips, Two-spotted Spider Mite, Juniper Webworm, Whiteflies	1 /₂ fl. oz. per 3 gals. water or 1 pt. per 100 gals. of water	Apply the recommended rates. Spray when listed pests first appear. Try to spray underside of leaves and penetrate dense foliage.
WAX PLANT (Hoya), WILLOW, YELLOWWOOD,	Apple-and-Thorn Skeletonizer, Cotoneaster	1½ fl. oz. per 3 gals.	
and YEW	Webworm, European Pine Sawfly, Fall Webworm, Hemlock Chermes, Oak Looper, Obliquebanded Leafroller, Pear Slug, Tent Caterpillar	of water or 2 pts. per 100 gals. of water	
	Mimosa Webworm	1⁄2 fl. oz. in 3 gals. of water or 1 pt. in 100 gals. of water	Apply as a thorough foliar spray when adults first appear. Try to spray underside of leaves and penetrate dense foliage.
	 Do not use on Ferns, Poinsettia, Hibiscus, Papaya, Pilea, and Gardenia, since injury to the plants may occur. Note: 1 fl. oz. = 2 tablespoons; 16 fl. oz. = 1 pint 		
	 The maximum application rate on all ornamentals is 2 pts. (1.0 lbs. a.i.) per acre. Make a maximum of one application per crop cycle. The REI is 7 days for flowers and other commercial ornamentals grown for cutting. The REI is 2 days for all other commercial ornamentals. Application is permitted only on commercial ornamentals grown outdoors in nurseries. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds). 		

INSECT CONTROL ON ORNAMENTALS GROWN OUTDOORS IN NURSERIES

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a dry place. Open dumping is prohibited. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. To avoid harming aquatic organisms in rivers and other surface waters, do not pour the concentrate, spray mixture, or rinse water into sanitary drains (for example, street drains). If pesticide, spray mixture, or rinsate cannot be disposed of by use according to the label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: NONREFILLABLE CONTAINER (EQUAL TO OR LESS THAN 5 GALLONS): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, incinerate or burn, if allowed by state and local authorities. Stay out of smoke from burning container. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

NONREFILLABLE CONTAINER (GREATER THAN 5 GALLONS): Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Turn the container or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available, or puncture and dispose of in a sanitary landfill, incinerate or burn, if allowed by state and local authorities. Stay out of smoke from burning container. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup and disposal of wastes.

REFILLABLE CONTAINER: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration or by other procedures approved by State and local authorities.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES ranty and Limitations of Liability and Remedies before using this produc

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 Agri-Enterprises, LLC (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 Agri-Enterprises, LLC'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.

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