

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

APR 1 0 2008

Sherry Movassaghi, Ph.D.
Bayer Crop Science
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Dr. Movassaghi:

Subject: Revisions per Agency's Notice of Reregistration dated May 22, 2007
DiSyston 8 Emulsifiable Systemic Insecticide
EPA Reg. No. 264-734
Your submission dated March 31, 2008

The labeling referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(A), is acceptable and a stamped copy of the label is enclosed for your convenience in obtaining state registrations. The Agency notes, however, that two revisions stipulated in the May 22, 2007 Notice of Reregistration have not been incorporated into the submitted labeling. Specifically: under the heading "ENGINEERING CONTROLS" in the second bullet item following the paragraph beginning "Applicators using motorized...." please replace "wear a NIOSH-approved dust mist filtering respirator with any R, P, or HE filter" with "wear 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, P, or HE prefilter.". Also, under the heading "VEGETABLES", in the "REMARKS" for the crops Brussels sprouts and Cauliflower add "Do not apply by chemigation." directly above "Apply by shank injection only.". Please incorporate these revisions in the actual printed finished labeling if printing has not yet occurred, or at the next label printing if printing of the finished label has already occurred. Please forward two copies of final printed labeling incorporating the above revisions as soon as possible, so that they will be available for the Agency's Registration Review process for this chemical. Thank you for your cooperation in this matter.

Sincerely,

George LaRocca. Product Manager 13 Insecticide Branch Registration Division (7505P)

### RESTRICTED USE PESTICIDE

Due to acute oral, dermal, inhalation, eye, and skin 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.

# Di-Syston® 8 Emulsifiable Systemic Insecticide

8 pound per Gallon Formulation	Low Odor Formula	Formulated for Effective Soil Treatment
ACTIVE INGREDIENT:		
Disulfoton, O,O-Diethyl S-[2-(ethyl	thio)ethyl]-phosphorodithioate	85%
		<u>15%</u>
•		100%

Contains 8 lbs. O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate per gallon. Contains petroleum distillates.

EPA Reg. No. 264-734

EPA Est. No.



# STOP – Read the label before use. KEEP OUT OF REACH OF CHILDREN DANGER POISON PELIGRO



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

Contains an organophosphate that inhibits cholinesterase.

If swallowed	Call a poison control center or doctor immediately for treatment advice.
	Do not give any liquid to the person.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
If on skin or clothing	Take off contaminated clothing.
	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control center or doctor for treatment advice.
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> </ul>
·	Call a poison control center or doctor for treatment advice.
If inhaled	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
	Call a poison control center or doctor for further treatment advice.

In case of emergency call toll free the Bayer CropScience Emergency Response Teleph**Recorp PRO**34-7577. Have a product container or label with you when calling a poison control center or doctor.

In EPA Letter Dated:

APR 1 0 2008

Under the Federal Insecticide, Fangicide, and Rodenticide Act, as amended, for the posticide registered under EPA Reg. No.

**Note To Physician:** ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. This product also contains petroleum distillates, which may pose any aspiration pneumonia hazard. Probable mucosal damage may contraindicate the use of gastric lavage.

SYMPTOMS OF POISONING: A sense of "tightness" in the chest. Sweating. Contracted pupils. Stomach pains. Vomiting and diarrhea.

### PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Fatal if swallowed, inhaled, or absorbed through the skin. Corrosive. Causes irreversible eye damage. Rapidly absorbed through the skin. Causes skin burns. Do not get in eyes, on skin, or on clothing. Do not breathe fumes or spray mist. Wear the Personal Protective Equipment (PPE) specified below. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse.

### Handler PPE Requirements:

### Personal Protective Equipment:

Some materials that are chemical-resistant to this product are (Barrier Laminate or Butyl Rubber). If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

### Handlers using engineering controls must wear:

- · long-sleeved shirt and long pants
- shoes plus socks

### In addition to the above, mixers and loaders must wear:

- Chemical-resistant gloves
- Chemical-resistant apron

See Engineering Controls for additional requirements.

### Handlers engaged in those activities for which use of an engineering control is not possible must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- · Chemical-resistant footwear plus socks
- Chemical-resistant apron (if exposed to the concentrate)
- Chemical-resistant headgear (if overhead exposure)
- · Protective eyewear (goggles, face shield, or safety glasses)
- 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, P, or HE prefilter.

### **User Safety Requirements**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

### **ENGINEERING CONTROLS:**

Mixers and loaders must use a closed loading system providing dermal and inhalation protection and all loaders must use and maintain this system in a manner consistent with the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4). The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2 ml per disconnect. In addition, mixers and loaders must:

- wear long-sleeved shirt and long pants, chemical-resistant gloves and apron, shoes, and socks;
- 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 the following PPE:
  - Coveralls, chemical-resistant footwear plus socks, chemical-resistant headgear (if overhead exposure)

 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, P, or HE prefilter.

Applicators using motorized ground-equipment (except for motorcycles) must use and maintain an enclosed cab for dermal protection in a manner that is consistent with the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)]. In addition, applicators using an enclosed cab must:

- · wear long-sleeved shirt and long pants, shoes, and socks;
- wear a NIOSH-approved dust mist filtering respirator with any R, P or HE filter; 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 above;
  and;
- be provided and have immediately available for use in case of an emergency when they must exit the cab, the following PPE:
  - · Coveralls over long-sleeved shirt and long pants
  - · Chemical-resistant gloves
  - Chemical-resistant footwear plus socks
  - Chemical-resistant headgear (if overhead exposure) and,
  - A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter.

Applicators re-entering the enclosed cab after spending time in the treated area must:

- · 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.

For aerial application, pilots must use an enclosed cockpit in a manner that is consistent with the WPS or Agricultural Pesticides [40 CFR 170.24(d)(4)]. Human flagging is prohibited. Use mechanical flaggers or global positioning system (GPS) equipment.

### **User Safety Recommendation**

### Users should:

- 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 pesticide is extremely toxic to birds, mammals, fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months. Poorly draining soils and soils with shallow watertables are more prone to product runoff that contains this product.

A level, well maintained 25 foot vegetative buffer strip between areas to which this product is applied to permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Disulfoton is known to leach through soil into ground water 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 ground-water contamination.

This pesticide is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

### RESTRICTIONS

Not for residential use. Do not use on other crops used for food or forage. Use only according to label directions. Application at rates above those shown may result in illegal crop residues. Do not use in greenhouses. Do not apply in any manner not specified on the label.

### **DIRECTIONS FOR USE**

### RESTRICTED USE PESTICIDE

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

### **General Application Restrictions:**

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.

Application by hand held equipment is prohibited for all sites.

A level, well maintained 25 foot vegetative buffer strip between areas to which this product is applied to permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: Conservation Buffers to Reduce Pesticide Losses for additional guidance. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

### **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), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

### Restricted-Entry Intervals:

Do not enter or allow workers to enter into treated areas during the restricted entry interval (REI). The REI for all crops is 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches a year.

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas without restriction if there will be no contact with anything that has been treated.

### Early Re-entry Personal Protective Equipment:

The following PPE is 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:

- · Coveralls worn over long-sleeved shirt and long pants
- · Chemical-resistant gloves made of any waterproof material
- · Chemical-resistant footwear plus socks
- Chemical-resistant headgear (if overhead exposure)
- Protective evewear

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

### STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577, or contact Chemtrec at 1-800-424-9300.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

DI-SYSTON systemic insecticide enters the plant by absorption through the roots. The insecticide placed near the roots is translocated to all parts of the plant and kills sucking insects feeding on the plant.

The formulation of DI-SYSTON 8 is highly versatile and offers many forms of application. It can be sprayed or injected into the furrow at planting time or soil injected as a side-dress treatment at planting time or after plants become established. Applications may be made in water emulsion, with liquid fertilizer, or undiluted in specially designed equipment for low volume soil injection but never on crops for which less than 1 quart DI-SYSTON 8 per acre is the recommended dosage. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

Do not contaminate feed or food.

### RECOMMENDED APPLICATIONS

**IMPORTANT:** When used on cotton, or lettuce at the maximum recommended rates under adverse conditions such as extremely cool or wet or extremely dry weather, DI-SYSTON may cause some delay in emergence, stunting of seedlings, or reduction of stand. Such damage may be more pronounced in light sandy soils.



MIXING WITH LIQUID FERTILIZER OR OTHER PESTICIDES: DI-SYSTON 8 is physically compatible with many registered pesticides and liquid fertilizers. When considering mixing DI-SYSTON 8 with other pesticides or with liquid fertilizer, first contact your dealer. For further information, contact your Bayer CropScience representative. If your dealer and Bayer CropScience representative have no experience with the combination you are considering, you should conduct tests to determine physical compatibility. A compatibility test should be conducted with each batch of liquid fertilizer because of the variability of these fertilizers. When mixing with certain high phosphorous liquid fertilizers, the use of COMPEX compatibility agent (or other equivalent agents) at 1 quart per 100 gallons of mixture may be needed to assure proper mixing.

# WHEN CONDUCTING COMPATIBILITY TESTS, WEAR ALL PROTECTIVE GEAR AND OBSERVE ALL PRECAUTIONS LISTED IN THE PRECAUTIONARY STATEMENTS SECTION OF THIS LABEL.

To determine physical compatibility, pour the recommended proportions of each chemical with the proportion of water which will be present in the spray tank or chemical supply tank into a suitable container. Mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered physically compatible. When mixing with wettable powder or dry flowable formulations, add and disperse these first, then add liquid pesticides. If application will be through an irrigation system, conduct another compatibility test at the concentrations which will be present in the irrigation lines. If there is any separation which cannot be remixed readily, Bayer CropScience recommends that the combination not be used. Combinations should be kept agitated and should be applied immediately. Do not allow combinations to sit for prolonged periods in a spray or chemical supply tank or irrigation line.

### **USE IN CHEMIGATION SYSTEMS**

DI-SYSTON 8 may be applied through irrigation systems only on those crops listed under Recommended Applications where application through irrigation systems is recommended.

Types of Irrigation Systems: Apply DI-SYSTON 8 only through sprinkler, including center pivot, lateral move, side roll, or overhead solid set irrigation systems; or low pressure drip (trickle) irrigation systems. Do not apply DI-SYSTON 8 through any other type of irrigation system.

### GENERAL DIRECTIONS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring: 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.

Apply only when wind speed is 10 mph or less.

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

For ground rig applications, apply product no more than 4 feet above the ground or the crop canopy, and only when wind speed is 10 mph or less at the application site as measured by an anemometer.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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

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

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

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

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

Using Water from Public Water Systems: DO NOT APPLY DI-SYSTON 8 THROUGH ANY IRRIGATION SYSTEM 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 out of the year.

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

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

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

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

Posting required for chemigation does not replace other posting and reentry interval requirements for farm worker safety.

Agitation: For application of DI-SYSTON 8 alone, a chemical supply tank is not necessary for premixing since DI-SYSTON 8 mixes well with water in the irrigation line. If a chemical supply tank is used, constant strong mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

Chemical Supply Tank Dilution: If a chemical supply tank is used, you must determine the required amounts of DI-SYSTON 8 and water to mix in the tank.

The amount of DI-SYSTON 8 needed equals the number of pints of DI-SYSTON 8 to be applied per acre multiplied by the number of acres to be chemigated.

The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump multiplied by the number of hours chemigation will take place.

The amount of water needed equals the amount of emulsion needed minus the amount of DI-SYSTON 8 needed.

For example, for center-pivot or automatic-move linear systems, if you want to apply 3 pints of DI-SYSTON 8 per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need: 3 pints of DI-SYSTON 8 per acre X 130 acres = 390 pints or 48.75 gallons of DI-SYSTON 8. And, you need: 15 gallons per hour X 20 hours = 300 gallons of emulsion, minus 48.75 gallons of DI-SYSTON 8 = 251.25 gallons of water.

Another example, for solid set and manually controlled linear systems, is if you want to apply 3 pints of DI-SYSTON 8 per acre during the last 60 minutes of a set irrigating 6 acres and your injection pump delivers 20 gallons per hour, you need 3 pints of DI-SYSTON 8 per acre X 6 acres = 18 pints or 2.25 gallons of DI-SYSTON 8 for the 6 acre set. And, you need 20 gallons per hour X 1 hour = 20 gallons of emulsion, minus 2.25 gallons of DI-SYSTON 8 = 17.25 gallons of water for the 6 acre set.

Cleaning the Chemical Injection System: In order to accurately apply pesticides, the chemical injection system must be kept clean; free of chemical or fertilizer residues and sediments. Refer to your owners manual or ask your equipment supplier for the cleaning procedure for your injection system.

Flushing the Irrigation System: At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

### **Equipment Area Contamination Prevention**

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas.

Center-Pivot and Automatic-Move Linear Systems: Inject the specified dosage per acre continuously for one complete revolution or move of the system. DO NOT USE END GUNS. The system should be run at maximum speed.

Solid Set and Manually Controlled Linear Systems: Injection should be during the last 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. DO NOT USE END GUNS.

RECOMMENDED APPLICATIONS			
CROP	USE	DOSAGE	REMARKS
Cotton Herbicide Safener	0.75 fl oz to1.2 fl oz 1000 ft. row	Aerial applications are prohibited. Apply at plant, in furrow only. For use only as an herbicide safener.	
		PREPLANT: As a preplant soil incorporated treatment, DI-SYSTON 8 may be applied in approximately a 6-inch band as a water emulsion.	
	When used as		- OR -
an herbicide safener, Di- Syston will also control: Aphid,	-	PLANTING/REPLANTING: Apply as a water emulsion or with liquid fertilizer. Spray/apply in the furrow or soil inject on each side of the furrow. This application may be combined with a fungicide application which is registered and recommended for disease on this crop.	
	Mites, Thrips (Except Western flower thrips)	,	RATE CHART FOR PREPLANT OR PLANTING TIME APPLICATION
			Heavy Soil Medium Soil Light Soil
	novor ampo,		1.2 fl oz/1000 ft 1 fl oz/1000 ft 0.75 fl oz/1000 ft
			of row or 1 pt/acre of row or 12 fl oz/acre of row or 9 fl oz/acre
			At planting, application of DI-SYSTON may be used in conjunction with a pre-emergent surface applied or preplant incorporated treatment of Command Herbicide. Refer to the herbicide product label for appropriate preplant or preemergent herbicide application directions and use rates. Do not reduce the application rate of DI-SYSTON insecticide when Command herbicide is applied as a banded treatment.
		Do not graze treated fields after any application of DI-SYSTON 8. Do not feed treated forage to livestock.	
	West of the Rocky Mountains, some mite populations have developed resistance to organophosphate insecticides, including Di-Syston. Consult your local cooperative extension service, agricultural advisor or Bayer CropScience representative for details.		

## VEGETABLES

CROP	INSECT	DOSAGE	REMARKS
Beans (succulent, including snap or green lima)	Aphid Leafhopper Mexican bean beetle (larvae) Mites Thrips	0.9 fl oz per 1000 feet -OR- 1 pt per acre	Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.  For snap or green Lima beans, apply in a water emulsion or with liquid fertilizer as a soil injection on each side of the seed furrow at planting time only. Do not apply more than once per year. Do not apply within 60 days of harvest. Do not feed treated vines or hay. Not for use on dry beans, peas, or lentils.
Brussels sprouts (For use in California only)	Aphids Flea beetles Leafhopper Mites Thrips	1.1 fl oz per, 1000 feet of row (36" row spacing) up to maximum of 1 pt per acre  Do not apply to vegetab FIELD APPLICATION: with liquid fertilizer as ar transplanted row at plan dressing after plants are application per year nor 40 days of harvest for care	Do not apply to vegetables grown for seed.  FIELD APPLICATION: Apply specified dosage in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow or transplanted row at planting and where necessary, injected as a side-dressing after plants are established. Do not apply more than one field application per year nor within 30 days of harvest for brussels sprouts, or
Cauliflower (For use in California only)	Aphids Flea beetles Leafhopper		40 days of harvest for cauliflower.  Apply by shank injection only.

RECOMMENDED APPLICATIONS			
CROP	INSECT	DOSAGE	REMARKS
Broccoli (For use in California only)	Aphids Flea beetles Leafhopper	1.1 fl oz per 1000 ft of row (36" row spacing) up to maximum of 1 pt per acre	Broccoli FIELD APPLICATIONS: Apply specified dosage in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow or
Cabbage (Including tight- heading	Aphids Flea beetles		transplanted row at planting or injected as a side-dressing after plants are established. Do not apply directly on the seed. Do not apply more than one field application per year. Do not use within 14 days of harvest for broccoli or 42 days of harvest for cabbage.
varieties of Chinese cabbage)	Root aphids	2.1 fl oz per 1000 ft of row (for 36 inch row spacing) up to 2 pt per acre	Do not apply by chemigation.  Apply by shank injection only.  Cabbage  TRANSPLANT SEED BEDS: Apply evenly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 1 pint per acre. Work into the top 2 to 3 inches of soil and plant seed in normal manner.
			FIELD APPLICATIONS: Apply specified dosage in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow or transplanted row at planting or injected as a side-dressing after plants are established. Do not apply directly on the seed. Do not apply more than one field application per year. Do not use within 14 days of harvest for broccoli or 42 days of harvest for cabbage.  Do not apply by chemigation.
Lettuce (For use in California only)	Aphids Leafhoppers Mites Root aphids Thrips	0.6 to 1.2 fl oz per 1000 ft of row (20" row spacing) up to maximum of 1 to 2 pt per acre	Read "IMPORTANT" statement under "RECOMMENDATIONS APPLICATIONS" for additional information before use on this crop.  CHEMIGATION: Row treatment applications as listed below may be applied through low-pressure (drip or trickle) irrigation systems. Follow all directions given under Chemigation section of this label.  SEEDED LETTUCE: Do not apply to transplanted lettuce. Apply at seeding or after seeding, in water or liquid fertilizer as a side-dress injection on each side of the row. Do not apply directly on the seed. Do not make more than one application per crop season. Do not apply within 60 days of harvest. Use the higher rate on heavy organic soils.

RECOMMENDED APPLICATIONS			
CROP	INSECT	DOSAGE	REMARKS
Easter Lilies	Aphids Lace bug Leafhoppers Mites Thrips Whiteflies	0.53 to 1.1 fl oz per 100 ft of row	Apply in the furrow over the bulbs after they are set, but before covering with soil. The higher dosage is recommended for heavy organic or muck soils.  Maximum number of applications: 1 per year

### IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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### **NET CONTENTS:**



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Di-Syston 8 Emulsifiable Systemic Insecticide (MASTER) Approved 05/22/07