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FEB 5 1990

Mr. John S. Thornton
Mobay Corporation
Agricultural Chemicals Division
P.O. Box 4913
Kansas City, MO 64120

Dear Mr. Thornton:

Subject: Low Odor Formulation
Di-Syston 8
EPA Registration No. 3125-307
Your Application Dated November 12, 1990

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you make the labeling change indicated below prior to release for shipment of product bearing the amended labeling.

1. Under the Re-Entry Statements, the If eyes are contaminated should read "wash with plenty of flowing water. Get medical attention."
2. The term New Low Odor Formula can be used on the labeling for a period of 6 months from the date of this letter.

Submit five (5) copies of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Sincerely yours,

George T. LaRocca
Product Manager 15
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Richards

U.S. LABEL

Reason to Issue: To add new low odor formulation statement.

Date of Draft: 11/2/90 (Pre-Reg) (M)

EPA Reg. No. 3125-307

RESTRICTED USE PESTICIDE

Acute human oral, dermal, and inhalation 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

NEW LOW ODOR FORMULA

EMULSIFIABLE SYSTEMIC INSECTICIDE
8 POUND PER GALLON FORMULATION

FORMULATED FOR EFFECTIVE SOIL TREATMENT

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

ACTIVE INGREDIENTS:
Disulfoton, O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate 85%

INERT INGREDIENTS: 15%
100%

NET CONTENTS GALLONS

KEEP OUT OF REACH OF CHILDREN

EPA Reg. No. 3125-307
EPA Est. ~~3125-MO-1~~

DANGER  POISON

(See rear panel for Statements of Practical Treatment and Other Precautionary Statements)

PELIGRO
PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
(TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

STOP - READ THE LABEL BEFORE USE

MOBAY CORPORATION
A Bayer USA INC. COMPANY
AGRICULTURAL CHEMICALS DIVISION
Box 4913, Kansas City, Missouri 64120

Note: Underlined letters in chemical nomenclature should be ~~italicized~~ when printed, not underlined.

with COMMENTS
in EPA Letter Dated:

FEB 5 00

3 8 21

DI-SYSTON 8 insecticide

DIRECTIONS FOR USE

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

IMPORTANT: Read these entire Directions and Conditions of Sale before using DI-SYSTON 8 emulsifiable systemic insecticide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH TO BE THE DIRECTIONS FOR CORRECT USE OF THIS PRODUCT. THIS PRODUCT HAS BEEN TESTED FOR A RANGE OF WEATHER CONDITIONS SIMILAR TO THOSE WEATHER CONDITIONS THAT ARE ORDINARY AND CUSTOMARY IN THE GEOGRAPHIC AREA WHERE THE PRODUCT IS USED. 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, OR FROM FAILURE TO FOLLOW LABEL DIRECTIONS. IN ADDITION, FAILURE TO FOLLOW LABEL DIRECTIONS MAY CAUSE INJURY TO OTHER CROPS, ANIMALS, MAN, OR THE ENVIRONMENT. MOBAY OFFERS, AND THE BUYER ACCEPTS AND USES, THIS PRODUCT SUBJECT TO THE CONDITIONS THAT EXTRAORDINARY OR UNUSUAL WEATHER, OR FAILURE TO FOLLOW LABEL DIRECTIONS ARE BEYOND THE CONTROL OF MOBAY AND ARE, THEREFORE, THE RESPONSIBILITY OF THE BUYER.

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. When mixing with certain liquid high phosphorous fertilizers, the use of COMPEX® compatibility agent or other equivalent agents at the rate of 1 quart per 100 gal. of mixture may be needed to assure proper mixing. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

RECOMMENDED APPLICATIONS

IMPORTANT: When used on cotton, beans, tomatoes, 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. Plant injury may also occur or may be enhanced when certain pre-emergent herbicides are used in conjunction with DI-SYSTON.

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. 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 nonuniform 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.

Drift

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

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 PHYSICALLY 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.

USE IN CHEMIGATION SYSTEMS (Continued)

DI-SYSTON 8 may be applied through sprinkler irrigation systems which may be supplied by a public water system only if the water from the public water system is 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 to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank.

Any irrigation system using water supplied from a public water system must also meet the following requirements.

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 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 or in cases where there is no water pump, when the water pressure decreases to the point where the pesticide distribution is adversely affected.

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

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

Posting Requirements

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

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

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 Requirements (Continued)

Posting required for chemigation does not replace other posting and reentry interval requirements for farmworker 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	INSECT	DOSAGE DI-SYSTON 8	REMARKS
FIELD CROPS Barley	Aphids Mites	1 pint per acre	Apply as a soil injection in a water emulsion or with liquid fertilizer at planting time. Do not apply within 60 days of harvest. Do not graze or cut for forage within 30 days of treatment.
Barley (Foliar Application Spring or Fall)	Aphids (Including Greenbugs) (See NOTE in Remarks)	1/2 to 1 pt. per acre	<p>For application by aircraft or ground equipment: Apply specified dosage per acre in sufficient water to obtain thorough coverage but not less than 1 gallon total volume per acre. Use the lower rates on plants up to tillering (stooling). Higher rates should be used after plants begin to tiller.</p> <p>For application in liquid fertilizer: Mix 1/2 to 1 pint of DI-SYSTON 8 in the amount of liquid fertilizer to be applied per acre. Apply this mixture as a top dressing with suitable ground equipment. Foliar applications may be made following an at-planting application, however, regardless of method of application do not apply more than a total of 2 pints per acre of DI-SYSTON 8 per crop season. Do not make any applications within 30 days of grain harvest.</p> <p style="text-align: center;">NOTE</p> <p>(1) Do not graze treated fields after any application of DI-SYSTON 8. (2) Due to greenbug resistance in certain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
FIELD CROPS	(Cont'd)		
Corn Field Popcorn	Aphids Leafhoppers Mites Thrips	1.2 fl. ounces per 1000 feet of row for any row spacing*. (for 40 inch row spacing use 1 pint per acre)	<p><u>TREATMENT AT PLANTING TIME:</u> As a water emulsion, spray in 4- to 6-inch band directly behind the planter shoe in front of the press wheel or apply with liquid fertilizer in split bands on each side of the corn row. Do not apply directly to the seed. Do not forage or cut treated corn for food, feed or ensilage within 28 days of treatment.</p> <p><u>POST-PLANT SIDE-DRESS TREATMENT:</u> An alternative treatment for early season control of aphids, leafhoppers, mites and thrips, may be made in a water emulsion or with liquid fertilizer as a soil injection on each side of the furrow after emergence. Do not forage or cut treated corn for food, feed, or ensilage within 28 days of treatment.</p>
	Aphids Mites	8 to 16 fl. ozs. Note: Apply only one soil treatment and one foliar treatment per crop season.	<u>FOLIAR TREATMENT:</u> Apply specified dosage per acre as a foliar spray in sufficient water for thorough coverage but not less than 1 gallon total volume per acre. Do not forage or cut treated corn for food, feed, or ensilage within 28 days of treatment.

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS						
FIELD CROPS (Cont'd)									
Cotton	Aphids Mites Thrips	.75 to 1.2 fluid ounces per 1000 feet of row (for any row spacing*) or 9 to 16 fluid ounces per acre (40 inch row spacing)	<p>Preplant: As a preplant soil incorporated treatment, DI-SYSTON 8 may be applied in approximately a 16 inch band as a water emulsion. Planting: Apply as a water emulsion or with liquid fertilizer. Spray in the furrow on either side of the seed or soil inject on each side of the furrow. Do not apply directly on the seed.</p> <p style="text-align: center;">RATE CHART FOR PREPLANT OR PLANTING TIME APPLICATION</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Heavy Soil</th> <th style="text-align: center;">Medium Soil</th> <th style="text-align: center;">Light Soil</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.2 fl. ozs. /1000 ft. of row or 1 pt. /acre</td> <td style="text-align: center;">1 fl. oz. /1000 ft. of row or 12 fl. ozs. /acre</td> <td style="text-align: center;">.75 fl. oz. /1000 ft. of row or 9 fl. ozs. /acre</td> </tr> </tbody> </table> <p>Post-Plant: If an additional treatment is needed, apply in a water emulsion or with liquid fertilizer as a soil injection on each side of the row. A single post-plant application at rates up to 2 pints/acre may be applied up to first squaring (90 days before harvest) or a single post-plant application at rates up to 1 pint/acre may be applied up to 28 days of harvest. Do not apply more than twice per season. Allow a minimum of 21 days between applications. Read "IMPORTANT" STATEMENT under "Recommended Applications" for additional information before use on this crop.</p>	Heavy Soil	Medium Soil	Light Soil	1.2 fl. ozs. /1000 ft. of row or 1 pt. /acre	1 fl. oz. /1000 ft. of row or 12 fl. ozs. /acre	.75 fl. oz. /1000 ft. of row or 9 fl. ozs. /acre
Heavy Soil	Medium Soil	Light Soil							
1.2 fl. ozs. /1000 ft. of row or 1 pt. /acre	1 fl. oz. /1000 ft. of row or 12 fl. ozs. /acre	.75 fl. oz. /1000 ft. of row or 9 fl. ozs. /acre							
	Aphids Thrips	3 to 9 fluid ounces Note: If foliar applications are made do not apply soil treatments within the same crop year	FOLIAR - Prior to Bloom: Apply specified dosage per acre as a foliar spray, using aircraft or ground equipment, in sufficient water for thorough coverage but not less than 1 gallon total volume per acre. Repeat as necessary but do not apply more than 3 times per season with the last application no later than bloom.						

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DI-SYSTON 8 insecticide

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
FIELD CROPS	(Cont.)		
Sorghum	Aphids (Greenbugs) (See NOTE below)	.9 to 1.2 fl. ozs. per 1000 ft. of row (for any row spacing*) (for 40 inch row spacing use 12 to 16 fl. ozs. per acre)	<u>AT PLANTING APPLICATION: FURROW</u> Apply as a water emulsion or in liquid fertilizer in the seed furrow approximately 1/2 inch above the seed. Do not apply directly on the seed.
		1.2 fl. ozs. per 1000 ft. of row (for any row spacing*) (for 40 inch row spacing use 1 pint per acre)	<u>AT PLANTING APPLICATION: BAND</u> Apply as a water emulsion or in liquid fertilizer in a 4 to 6 inch band directly behind the planter shoe in front of the press wheel. Do not apply directly on the seed.
		<u>NOTICE:</u> The following side-dress and/or foliar applications may be made in addition to granular or liquid at planting applications. A <u>total</u> of <u>5 applications</u> may be made to a single sorghum crop (2 soil applications, granular or liquid, plus 3 foliar applications of rates 8 fluid ounces or less/ acre).	
		1.2 fl. ozs. per 1000 ft. of row (for any row spacing*) (for 40 inch row spacing use 1 pint per acre)	<u>POST PLANTING APPLICATION: SIDE-DRESS</u> Apply as a water emulsion or with liquid fertilizer injected into the row on both sides of the furrow at any time up to boot stage, but not within 45 days of use for forage or fodder.

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS															
FIELD CROPS (Cont'd)	Aphids (Greenbugs) (See NOTE below)	4 to 8 fluid ounces per acre	<p><u>POST PLANTING APPLICATION: FOLIAR SPRAY - A Maximum of 3 Foliar Applications May Be Made of Rates 8 Fluid Ounces or Less/Acre.</u> Apply specified dosage per acre in sufficient water to obtain thorough coverage. For aerial application use not less than 1 gallon of water per acre. Use not less than 5 gallons of water per acre with ground equipment. <u>For Midge:</u> Make one application when 50% of the seed heads have emerged from the boot. Make a second application 3 to 5 days later.</p> <table border="1"> <thead> <tr> <th colspan="3"><u>DAYS FROM LAST APPLICATION TO HARVEST FOR FOLIAR RATES OF 4 to 8 Fluid Ounces/ACRE</u></th> </tr> <tr> <th><u>APPLICATION SCHEDULE</u></th> <th><u>FOR GRAIN</u></th> <th><u>FOR FORAGE OR FODDER</u></th> </tr> </thead> <tbody> <tr> <td><u>Any soil plus any foliar</u></td> <td>34</td> <td>45</td> </tr> <tr> <td><u>1 or 2 foliar</u></td> <td>7</td> <td>45</td> </tr> <tr> <td><u>3 foliar</u></td> <td>34</td> <td>60</td> </tr> </tbody> </table>	<u>DAYS FROM LAST APPLICATION TO HARVEST FOR FOLIAR RATES OF 4 to 8 Fluid Ounces/ACRE</u>			<u>APPLICATION SCHEDULE</u>	<u>FOR GRAIN</u>	<u>FOR FORAGE OR FODDER</u>	<u>Any soil plus any foliar</u>	34	45	<u>1 or 2 foliar</u>	7	45	<u>3 foliar</u>	34	60
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Sorghum Midge (Arkansas, Louisiana, Oklahoma, Texas)																		
Sorghum	Banks grass mites (in Texas, excluding Trans-Pecos area, and in Oklahoma)	8 fluid ounces per acre																
<p>NOTE: Due to greenbug resistance in certain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>																		
Tobacco	Aphids Flea beetles	4 pints (1/2 gallon) per acre	Apply as a water emulsion broadcast spray in sufficient water for thorough coverage. Disk or till the soil to a depth of 2 to 3 inches before setting plants. Do not make more than one field application per crop season regardless of the formulation of DI-SYSTON used.															

DI-SYSTON 8 insecticide

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS																				
<p>FIELD CROPS (Cont'd)</p> <p>Wheat (Foliar Appli- cation Spring or Fall)</p>	<p>Aphids (Greenbugs) Mites (See NOTE in "REMARKS")</p>	<p>4 to 12 fluid ounces pe acre</p>	<p><u>For application by aircraft or ground equipment:</u> Apply specified dosage per acre in sufficient water, to obtain thorough coverage but not less than 1 gallon total volume per acre. Use the lower rates on plants up to tillering (stocling). Higher rates should be used after plants begin to tiller.</p> <p><u>For application in liquid fertilizer:</u> Mix 6 to 12 fluid ounces of DI-SYSTON 8 in the amount of liquid fertilizer to be applied per acre. Apply this mixture as a top dressing with suitable ground equipment.</p> <p><u>Fall Applications:</u> Two applications may be made in the fall. Allow 30 days between applications.</p> <p><u>Spring Applications:</u> Application at green-up may be made following "fall applications." A second application may be made 30 days following the first spring application. Do not make <u>any</u> applications within 30 days of grain harvest.</p> <p><u>NOTE</u></p> <p>(1) Do <u>not</u> graze treated fields or cut for forage after <u>any</u> application of DI-SYSTON 8. (2) Due to greenbug resistance in certain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>																				
<p>Wheat (Fall)</p>	<p>Hessian Fly Aphids (Greenbugs & Oat bird cherry Except California)</p>	<p>0.25 fl. ounces per 1000 ft. of row (see chart below) -OR- up to 1 pint per acre</p>	<p>Apply as a soft injection in water emulsion or with liquid fertilizer at planting time in the fall.</p> <p>NOTE: (1) Do <u>not</u> graze treated fields or cut for forage after <u>any</u> application of DI-SYSTON 8. (2) Due to greenbug resistance in certain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.</p>																				
<p style="text-align: center;">Ounces DI-SYSTON 8 per 1000 ft. of row based</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Row Spacing</th> <th style="text-align: center;">Ounces/Acre</th> <th style="text-align: center;">on 3 inch band</th> </tr> </thead> <tbody> <tr> <td>7 or 8 inch rows</td> <td style="text-align: center;">15.5</td> <td style="text-align: center;">.25</td> </tr> <tr> <td>10 inch rows</td> <td style="text-align: center;">13.25</td> <td style="text-align: center;">.25</td> </tr> <tr> <td>12 inch rows</td> <td style="text-align: center;">10.75</td> <td style="text-align: center;">.25</td> </tr> <tr> <td>14 inch rows</td> <td style="text-align: center;">9.5</td> <td style="text-align: center;">.25</td> </tr> <tr> <td>16 inch rows</td> <td style="text-align: center;">8.5</td> <td style="text-align: center;">.25</td> </tr> <tr> <td>18 inch rows</td> <td style="text-align: center;">7.0</td> <td style="text-align: center;">.25</td> </tr> </tbody> </table>			Row Spacing	Ounces/Acre	on 3 inch band	7 or 8 inch rows	15.5	.25	10 inch rows	13.25	.25	12 inch rows	10.75	.25	14 inch rows	9.5	.25	16 inch rows	8.5	.25	18 inch rows	7.0	.25
Row Spacing	Ounces/Acre	on 3 inch band																					
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16 inch rows	8.5	.25																					
18 inch rows	7.0	.25																					

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
NON-BEARING FRUIT			
Strawberries (Propagating Plants Only)	Aphids Mites (except cyclamen mite)	2.8 to 5 fluid ounces per 1000 feet of row (for any row spacing*) or 2 to 4 pints per acre (42 inch row spacing)	Apply in a water emulsion or with liquid fertilizer as a soil injection on each side of the row as needed. Do not use fruit from treated plants for food purposes.
NUTS			
Pecans (South Central & South Western States Only)	Aphids	1.5 to 3 pints per acre	Apply by spraying 6-foot bands of soil on both sides of the trees. The bands should be located under the main drip area of the trees. Work the treated soil to a depth of 2 to 3 inches. On irrigated pecans, apply water as soon as possible after treatment. Make only 1 application per season. Early spring treatment is recommended. Do not harvest nuts within 80 days of treatment. Do not graze grass under treated trees. Do not tank mix this product with Phosalone.
Pecans	Aphids	4 to 6 fluid ounces	<u>Foliar Applications:</u> Apply specified dosage in 100 gallons of water as a full coverage spray using not more than 400 gallons of finished spray per acre. Repeat as necessary up to 3 times per season. Do not apply within 30 days of harvest. Do not graze grass under treated trees. Do not tank mix this product with Phosalone.
		3/4 to 1 pint	<u>Application by Aircraft:</u> Apply specified dosage per acre in sufficient water to obtain thorough coverage but not less than 5 gallons total volume per acre. Do not apply more than 3 times per season nor within 30 days of harvest. Do not graze grass under treated trees. Do not tank mix this product with Phosalone.

RECOMMENDED APPLICATIONS

CROP VEGETABLES	INSECT	DOSAGE DI-SYSTON 8	REMARKS
Beans	Aphid Leafhoppers Mexican bean beetle (larvae) Mites Thrips	.9 to 1.9 fluid ounces per 1000 feet of row (for any row spacing*) - OR - 1 to 2 pints per acre (30 inch row spacing) (For extremely narrow row spacing, do not exceed the 2 pints per acre rate)	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. For dry beans, apply as above at planting time or inject as a side-dressing on each side of the row after plants become established but not within 60 days of harvest. Do not apply directly on the seed. Do not apply more than once per season. Do not feed vines or hay. Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop.
Brussels Sprouts	Aphids Flea beetles Leafhoppers Mites Thrips	1.1 fluid ounces per 1000 feet of row (for any row spacing*) OR 1 pint per acre (36 inch row spacing)	<u>Transplant Seed Beds:</u> 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. <u>Field Applications:</u> 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 directly on the seed. Do not apply more than two field applications per season nor within 30 days of harvest for Brussels sprouts or 40 days of harvest for cauliflower. Allow a minimum of 21 days between applications.
Cauli- flower	Aphids Flea beetles Leafhoppers	OR 1 pint per acre (36 inch row spacing)	Do not apply directly on the seed. Do not apply more than two field applications per season nor within 30 days of harvest for Brussels sprouts or 40 days of harvest for cauliflower. Allow a minimum of 21 days between applications.

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
VEGETABLES (Cont'd)			
Broccoli	Aphids Flea beetles Leafhoppers	1.1 fluid ounces per 1000 feet of row (for any row spacing*)	<u>Transplant Seed Beds:</u> 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.
Cabbage (Include tight heading varieties of Chinese Cabbage)	Aphids Flea beetles	- OR - 1 pint per acre (36 inch row spacing*)	<u>Field Applications:</u> 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 season. Do not use within 14 days of harvest for broccoli or 42 days of harvest for cabbage.
	Root aphids	1.7 fluid ounces per 1000 feet of row (for any row spacing*)	
Lettuce	Aphids Leafhoppers Mites Thrips	.6 to 1.2 fluid ounce per 1000 feet of row (for any row spacing*) -OR- 1 to 2 pints per acre (20 inch row spacing)	<u>Spring or Summer Seeded Lettuce:</u> Apply in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow at planting time only. Use the higher rate on heavy organic soils. Do not apply directly on the seed. Do not apply to transplanted lettuce. <u>Fall or Winter Seeded Lettuce:</u> Apply specified dosage in a water emulsion or as a soil injected side-dressing with liquid fertilizer at thinning time. Do not apply within 60 days of harvest. Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.
Peas	Aphids Leafhoppers	1 to 2.5 pints per acre	Apply in a water emulsion or with liquid fertilizer as an in-furrow spray or as an injection on each side of the seed furrow at planting or injected as a side-dressing after plants are established. Do not apply more than once per season nor within 50 days of harvest. Do not feed vines or hay.

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
VEGETABLES Potatoes	(Cont'd) Aphids	3 to 4 pints per acre	SOIL APPLICATION -- PRE-PLANT BROADCAST: Apply specified dosage per acre as a preplant broadcast application. Incorporate to a depth of 2 to 3 inches. Plant crop in usual manner. Do not make more than 2 soil applications of DI-SYSTON 8 per crop season regardless of method of application or formulation used. Do not tank mix this product with Phosalone.
	Aphids Flea beetles (except tuber beetles) Leafhoppers Potato psyllid Southern potato wireworm Colorado potato beetle (early season reduction)	2.25 to 3.5 fl. ozs. per 1000 feet of row (for any row spacing*) (for 38 inch row spacing use 2 to 3 pints per acre)	SOIL APPLICATION -- FURROW: Apply undiluted in specifically designed equipment for low volume soil injection, or apply in a water emulsion, or with liquid fertilizer as an in-furrow spray at planting. An additional side-dress application may be made as a water emulsion injection after plants become established. Do not make more than 2 soil applications of DI-SYSTON per crop season regardless of method of application or formulation used. Do not apply second soil application within 75 days of harvest. Higher rate to be used in organic soils. Do not tank mix this product with Phosalone. NOTE: Colorado Potato Beetle populations in the northeast states (except Maine), as well as Virginia and North Carolina, have developed resistance to insecticides, including DI-SYSTON. Consult your local Extension Service or MOBAY sales representative for details.
	Green peach aphids (East of the Rocky Mountains only)	6 to 16 fluid ounces per acre	FOLIAR APPLICATIONS: Using aircraft or ground equipment, apply specified dosage per acre in sufficient water to obtain thorough coverage, but not less than 1 gallon total volume per acre. Begin applications when pest first appears. Use the higher rates for heavy infestations. Repeat as necessary, but not more than 3 times per season nor within 30 days of harvest. Do not tank mix this product with Phosalone.
NOTE: Foliar applications may be made following at-planting soil treatment as recommended above or on the label for DI-SYSTON 15% Granular.			

*ON ROW CROPS WHERE ROW SPACING IS EXTREMELY NARROW, DO NOT PLACE TREATED ZONES (BAND OR FURROW) CLOSER TOGETHER THAN 6 INCHES.

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 8	REMARKS
VEGETABLES	(Cont'd)		
Potatoes	Green peach aphid Colorado potato beetle	3 pints per acre	<u>SPRINKLER IRRIGATION APPLICATION - ONLY IN OREGON, WASHINGTON, IDAHO AND UTAH:</u> A single application at the rate of 3 pints per acre may be made for control of Green peach aphid and Colorado potato beetle. Do not apply within 60 days of harvest. Application may be made following <u>at-planting</u> soil application as recommended on this label or the label for DI-SYSTON 15% Granular. Follow all directions given under the Chemigation section of this label.
Tomatoes	Aphids Flea beetles Leafhoppers Leaf miners Mites Colorado potato beetle (early season reduction)	1.2 to 3.5 fl. ozs. per 1000 feet of row (for any row spacing*) -OR- 1 to 3 pints per acre (38 inch row spacing)	<p><u>Transplant Seed Beds:</u> Apply evenly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 3 pint. per acre. Work into the top 2- to 3-inches of soil and plant seed in normal manner.</p> <p><u>Field Applications:</u> Apply specified dosage in a water emulsion or with liquid fertilizer as an <u>injection on each side of the seed furrow</u> or transplanted row at planting time. Do not apply directly on the seed. Where 2 field applications are required, use only 1.2 to 2.4 fluid ounces per 1000 feet of row, or 1 to 2 pints per acre, injected on each side of the seed furrow or transplanted row at planting and as a side-dressing after plants are established. Allow a minimum of 21 days between applications. Do not apply within 30 days of harvest.</p> <p>(NOTE: <u>Florida Only</u> - Rates up to 10.5 fluid ounces per 1000 feet of row, with a 72-inch row spacing, may be applied to highly alkaline soils as an injection on each side of the seed furrow or transplanted row at planting time only; or where 2 field applications are required, up to 5.25 fluid ounces per 1000 feet of row with a 72-inch row spacing, at planting time and up to 5.25 fluid ounces per 1000 feet of row as a side-dressing after plants become established. Do not apply within 30 days of harvest).</p> <p>Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.</p>

*ON ROW CROPS WHERE ROW SPACING IS EXTREMELY NARROW, DO NOT PLACE THREATENED ZONES (BAND OR FURROW) CLOSER TOGETHER THAN 6 INCHES.

RESTRICTIONS

Not for home garden 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 treat food crops grown in the greenhouse. Do not apply in any manner not specified on the label.

RE-ENTRY STATEMENTS FOR FARMWORKERS

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not allow reentry into treated fields within 24 hours of application unless appropriate protective clothing is worn. Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

(The following may appear on supplemental labeling accompanying the product)
Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings should include those statements found under the label heading "Precautionary Statements" and "Re-entry Statements" included on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: DANGER, area treated with DI-SYSTON 8 on (date of application). Do not allow reentry into treated fields within 24 hours of application ~~unless appropriate protective clothing is worn. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. If eyes are contaminated, wash with flowing water for at least 15 minutes. If swallowed, vomiting should be induced.~~ (See Precautionary Statements on label).

STORAGE AND DISPOSAL

Pesticide Disposal: Do not contaminate water, food or feed by storage or 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.

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 Jam 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 above. In spill or leak incidents, keep unauthorized people away. You may contact the Mobay Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Mobay Kansas City Emergency Response Telephone No. is 816-242-2582, or contact Chemtrec at 800-424-9300.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER



POISON

Poisonous if swallowed, inhaled, or absorbed through the skin. Rapidly absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear protective clothing, natural rubber gloves, and goggles.

Do not breathe fumes or spray mist. Wear a pesticide respirator jointly approved by the Mining Enforcement and Safety Administration (formerly the U.S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part 11.

Do not contaminate feed or food. Keep out of reach of children. Keep all unprotected persons out of the operating area or vicinity. Wash hands, arms, and face thoroughly with soap and warm water before eating or smoking.

HANDLING OF CONTAMINATED ARTICLES: Clothing and rags receiving undiluted DI-SYSTON 8 as a result of leaks, spills, or mishaps should be removed immediately and not reused. These contaminated articles should be buried in the same manner as the empty container; see container disposal section for directions. (Contaminated articles which should be discarded would include: hats, gloves, aprons, coats, boots, etc. not made of rubber or coated with rubber or other similar materials). Clothing receiving spray mist or droplets from the mixed, diluted DI-SYSTON 8 should be removed and decontaminated before reuse. This clothing can be decontaminated by machine washing separately from other items with soap or detergent and bleach in hot water twice before reuse. Protective clothing and equipment should be washed down with detergent or soap and bleach in water. Wash water from the cleaning of protective clothing or equipment should not be allowed to run off or otherwise enter water supplies.

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

STATEMENTS OF PRACTICAL TREATMENT

In case of poisoning, call a physician immediately. Have patient lie down and keep quiet. If swallowed, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (1/2 oz. or 15 ml.) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by sticking finger down throat. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Professional medical assistance should be secured immediately. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. Get medical attention immediately. If in eyes, wash with plenty of flowing water. Get medical attention immediately.

STATEMENTS OF PRACTICAL TREATMENT (Cont'd)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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply directly to water or wetlands. Drift and runoff from treated areas may be hazardous to fish in neighboring areas. Do not contaminate water by disposing of equipment washwaters. Cover or incorporate spills.

This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DI-SYSTON is a TM of Bayer AG, Germany.

COMPEX is a Reg. TM of Kalo Laboratories, Inc.
