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SEP 26 1990

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

Dear Mr. Thornton:

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Subject: Deletic 1 of Sugarcane and Rotational Crop Statement and Addition of Grazing Restriction for Peas and Beans DI-SYSFON Liquid Concentrate EPA Registration No. 3125-119 Your Application Dated August 22, 1989

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

1. At the end of the "Beans" and "Peas" remarks paragraphs, the statement should read "Do not feed b**ecated** vines or hay to livestock."

2. Under the Re-entry statement, the If In Eyes statement should read "Flush eyes with plenty of water. Call a physician if irritation persists."

3. Move "Aromatic Petroleum Distillate" to a footnote under the Inert Ingredients and add its percentage to that of the Inerts.

4. The common name "Disulfoton" should precede the chemical name in the ingredients statement.

5. Update the Environmental Hazards statement by changing "by cleaning of equipment or disposal of wastes" to "when disposing of equipment washwaters."

6. Delete the crop "Tomatoes" from the product labeling. This crop was not supported in response to the Disulfoton Registration Standard. -2-

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

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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)

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119-6779.BLD

Base Reg.(6779)

<u>U.S. LABEL</u> Date of Draft: <u>8/8/89 (M)</u> Supersedes Draft Dated: <u>2/4/87</u>

Reason to Issue:To delete use onDatesugarcane and to add a grazingSuperrestriction for peas and beans; revisePrecautionary statements in accordancewith EPA comments; to delete rotational crop statement.EPA Reg. No. 3125-119

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®

LIQUID CONCENTRATE

SYSTEMIC INSECTICIDE

FORMULATED FOR EFFECTIVE SOIL TREATMENT

Contains 6 lbs. <u>0</u>,<u>0</u>-Diethyl S- 2-(ethylthio)ethyl phosphorodithioate per gallon. 27%

NET CONTENTS GALLONS

KEEP OUT OF REACH OF CHILDREN

DANGER POISON

(See Rear Panel for Statements of Practical Treatment and Other Precautionary Statements)

> > not underlined.

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.)

EPA Reg. No. 3125-119

STOP - READ THE LABEL BEFORE USE

MOBAY CURPORATION MOBAY CURPORATION A Bayer USA INC. COMPANY AGRICULTURAL CHEMICALS DIVISION D7725-119 Note: Underlined letters in chemical nomenclature should be italicized when printed,

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 Liquid Concentrate systemic insecticide.

CONDITIONS OF SALE: THE DIRECTIONS ON THIS LABEL WERE DETERMINED THROUGH RESEARCH 10 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 Liquid Concentrate 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 liquid concentrate per acre is the recommended dosage. When mixing with

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certain liquid high phosphorous fertilizers, the use of COMPEX^R 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

<u>IMPORTANT</u>: When used on cotton, tomatoes, beans, 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.

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CROP FIELD CROPS	INSECT	Liquid Concentrate	REMARKS
Barley	Aphids Mites	1.3 pints 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.
(Foliar (Aphids (Including Greenbugs) (See NOTE in Remarks)	2/3 to 1-1/3 pts. per acre	For application by aircraft or ground equipment: Apply specified dosage per acre in sufficient water to obtain thorough coverage but not less than I gallon total volume per acre. Use the lower rates on plants up to tillering (stooling). Higher rates should be used afte: plants begin to tiller. For application in liquid fertilizer: Mix 2/3 to 1-1/3 pints of DI-SYSTON Liquid Concentrate in the amount of liquid fertilizer to be applied per acre. Apply this mixture as a top dressing with suitable ground equip- ment. Foliar applications may be made following an at-planting appli- cation, however, regardless of method of application do not apply more that a total of 2-2/3 pints per acre of DI-SYSTON Liquid Concentrate per crop season. Do not make any appli- cations within 30 days of grain harvest.
			NOTE
			 (1) Do not graze treated fields after any application of DI-SYSTON LC. (2) Due to greenbug resistance in certain areas, DI-SYSTON used alone may not provide satisfactory control Consult your local agricultural ad- visor or Extension Service for recommendations.

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CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	REMARKS
Corn Field	Aphids Leafhoppers Mites Thrips	1.6 fl. punces per 1000 feet of row for any row spac- ing*. (for 40 inch row spacing use 1.3 pints per acre)	TREATMENT AT PLANTING TIME: 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 fer- tilizer in split bands on each side of the corn row. Do not apply directly to the seed. Do not for- age or cut treated corn for food, feed or ensilage within 28 days of treatment. <u>POST-PLANT SIDE-DRESS TREATMENT:</u> An alternative treatment for early season control of aphids, leaf- hoppers, mites and thrips, may be made in a water emulsion or with liquid fertilizer as a soil in- jection 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.
Popcorn	Aphids Mites	2/3 to 1-1/3 pints Note: Apply only one soil treatment and one foliar treat- ment per crop season.	FOLIAR TREATMENT: Apply specified dosage per acre as a foliar spray in sufficient water for thorough coverage but not less than 1 gal- lon total volume per acre. Do not forage or cut treated corn for food, feed, or ensilage within 28 days of treatment.

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DI-SYSTON Liquid Concentrate

RECOMMENDED APPLICATIONS (Continued)

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<u> </u>	(Continued)				
CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	REMARKS		
	<u>PS</u> (Continued)		Preplant: As a preplant soil incorporated treatment, DI-SYSTON LC may be applied in approximately a 16 inch band as a water emulsion either alone or with a pre-emergent herbicide. Request Chemagro Bulletin No. DS 6720 for specific recommendations on a herbicide to be used with DI-SYSTON. <u>Planting</u> : 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.		
Cotton	Aphids Mites Thrips	l to 1.6 fluid ounces per 1000 feet of row (for any row spacing*) or .75 to 1.3 pints per acre (40 inch row shacing)	RATE CHART FOR PREPLANT OR PLANTING <u>TIME APPLICATION</u> <u>Heavy Soil Medium Soil Light Soil</u> 1.6 fl. ozs. 1.3 fl. ozs. 1 fl. oz. LC/1000 ft. LC/1000 ft. LC/10C2 ft. of row or of row or of row or 1 1/3 pts. 1 pt. LC/ 3/4 pt. LC/ <u>LC/acre acre acre</u> <u>Post-Plant</u> : If an additional treat- ment 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 2.6 pints of LC/acre may be applied up to first squaring (90 days before harvest) or a single post- plant application at rates up to 1.3 pints of LC/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 <u>"IMPORTANT"</u> statement under "Recommended Appli- cations" for additional information before use on this crop.		
	Aphids Thrips	<pre>1/4 to 3/4 pints Note: If foliar applications are made do not apply soil treatments within the same crop year.</pre>	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 I gallon total volume per acre. Re- peat as necessary but do not apply more than 3 times per season with the last application no later than bloom.		

RECOMMENDED APPLICATIONS

		(Continued)
CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	
FIELD CROPS (Liquid concentrate	
<u>FIELD CROPS</u> (Sorghum	Continued) Aphids (Greenbugs) See NOTE below)	use 1-1/3 pints per acre) <u>NOTICE</u> : The follow may be made in addi applications. A <u>to</u> single sorghum crop	AT PLANTING APPLICATION: FURROW 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. AT PLANTING APPLICATION: BAND 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 di- rectly on the seed. ring side-dress and/or foliar applications tion to granular or liquid at planting tal of 5 applications may be made to a (2 soil applications, granular or ar applications of rates 2/3 pints or POST PLANTING APPLICATION: SIDE- DRESS 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.

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RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	REMARKS
	Aphids (Greenbugs) (See NOTE below)	1/3 to 2/3 pints	POST-PLANTING APPLICATION: FOLIAR SPRAY - A Maximum of 3 Foliar Applications May Be Made of Rates 2/3 Pints or Less/Acre. Apply specified dosage per acre in suffi- cient 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
Sorghum	Sorghum Midge (Arkansas, Louisiana, Oklahoma, Texas)	per acre	ground equipment. For Midge: Make one application when 50% of the seed heads have emerged from the boot. Make a second application 3 to 5 days later. DAYS FROM LAST APPLICATION TO HARVEST FOR FOLIAR RATES OF
	Banks grass mites (in Texas, excluding Trans-Pecos area, and in Oklahoma)	2/3 to 1-1/3 pints per acre	1/3 to 2/3 PINTS/ACREAPPLICATIONFORFOR FOR FORAGESCHEDULGRAINOR FODDERAny soil plus3434any foliar34341 or 2 foliars7283 foliars3434For Banks Grass Mites:The 2/3 pint ratemay be applied as directed above foraphids.Rates above 2/3 pints per acremay not be applied if any soil applica-tions have been made.If rates above 2/3pints per acre are used, do not applymore than twice per crop season nor with-in 7 days of harvest of grain or 28 daysof use as forage or fodder.

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RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	REMARKS
Tobacco	Flea beetles	Liquid concentrate	Apply as a water emulsion broadcast spray
Tobacco	Aphids	5-1/3 pints (2/3	in sufficient water for thorough coverage.
(Flue-		gallon) per acre	Disk or till the soil to a depth of 2 to
cured)		garron, por core	3 inches before setting plants. Do not
(Virginia		1	make more than one field application per
and			crop season regardless of the formula-
Georgia)			tion of DI-SYSTON used.
			For application by aircraft or ground
		1	equipment: Apply specified dosage per
		1	acre in sufficient water, to obtain thor-
			ough coverage but not less than 1 gallon
		1	total volume per acre. Use the lower
Wheat	Aphids	1/3 to 1 pint	rates on plants up to tillering (stool-
	(Greenbugs)	per acre	ing). Higher rates should be used after
Applica-		per acre	plants begin to tiller.
tion	111000		For application in liquid fertilizer:
Spring			Mix 1/2 to 1 pint of DI-SYSTON Liquid
	(See NOTE		Concentrate in the amount of liquid fer-
(a]]	in	{	tilizer to be applied per acre. Apply
states	"Remarks")		this mixture as a top dressing with suit-
west of	itemarks j		able ground equipment.
the		2	Fall Applications: Two applications may
Mississip	ini		be made in the fall. Allow 30 days be-
River,	, 4,		tween applications.
and in		}	Spring Applications: Application at
Alabama			green-up may be made following "fall
and		1	applications." A second application
Tennessee	a)		may be made 30 days following the first
10111103300	- /		spring application. Do not make any
			applications within 30 days of grain har-
]	vest.
		J	NOTE
			(1) Do not graze treated fields after any
		1	application of DI-SYSTON LC. (2) Due to
			greenbug resistance in certain areas
			DI-SYSTON used alone may not provide
			satisfactory control. Consult your local
		1	agricultural advisor or Extension Service
			for recommendations.
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		RECOMMENDED APPLICATIO	NS (Continued)
000	THEFET	DOSAGE - DI-SYSTON	DEMADUS
CROP FIELD CROPS (C] INSECT	Liquid Concentrate	REMARKS Apply as a soil injection in water
Wheat (Fall)	Hessian fly	1.3 pints per acre	emulsion or with liquid fertilizer. at planting time in the fall.
<u>NON-BEARING FR</u> Strawberries (Propagating Plants Only	Aphids Mites (except		Apply in a water emulsion or with liquid fertilizer as a soil injec- tion on each side of the row as needed. Do not use fruit from treated plants for food purposes. ing)
<u>NUTS</u> Pecans (South Cen- tral & South Western States Only)	Aphids	2 to 4 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 l application per season. Early spring treatment is recommended. Do not harvest nuts within 80 days of treatment. Do not tank mix this product with Phosalone.
Pecans	Aphids	1/3 to 1/2 pint	Foliar Applications: Apply speci- fied 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 inis product with Phosalone. Application by Aircraft: Apply specified dosage per acre in suf- ficient water to obtain thorough coverage but not less than 5 gal-
		l to 1-1/3 pints	lons total volume per acre. Do not apply more than 3 times per season nor within 30 days of har- vest. Do not graze grass under treated trees. Do not tank mix this product with Phosalone.

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	Liquid concentrate		
A-6:4			
	spacing*) - or-		
beetle	acre (30 inch row	ing on each side of the row after	
(larvae)	spacing)	plants become established but not	
Mites	(For extremely narrow	within 60 days of harvest. Do not	
Thrips		apply directly on the seed. Do not	
•		apply more than once per season.	
		Read "IMPORTANT" statement under	
		"Recommended Applications" for ad-	
	1		
Anhids			
	1 5 fluid ouncor por		
maps	· · · · · · · · · · · · · · · · · · ·		
A			
	(36 inch row spacing)		
Leafhoppers			
	1	apply more than two field applica-	
		tions per season nor within 30	
		days of harvest for Brussels	
		sprouts, or 40 days of harvest	
		for cauliflower. Allow a minimum	
	INSECT Aphid Leaf- hoppers Mexican bean beetle (larvae) Mites	Aphid Leaf- hoppers1.25 io 2.5 fluid ounces per 1000 feet of row (for any row spacing*) - or- 1.3 to 2.6 pints per acre (30 inch row spacing)Mexican bean (larvae) (larvae) Mites Thrips1.3 to 2.6 pints per acre (30 inch row spacing)Mites Thrips(For extremely narrow row spacing, do not exceed the 2.6 pints per acre rate)Aphids Flea beetles Leafhoppers Mites1.5 fluid ounces per 1000 feet of row (for any row spac- 	INSECTDOSAGE - DI-SYSTON Liguid ConcentrateREMARKSAphid1.25 to 2.5 fluid ounces per 1000 feet of row (for any row spacing*) - or- beanFor snap or green lima beans, ap- ply in a water emulsion or with l'quid fertilizer as a soil in- jection on each side of the seed furrow at planting time only. For dry beans, apply as above at plant- ing time or inject as a side-dress- ing on each side of the row after plants become established but not within 60 days of harvest. Do not apply incetly on the seed. Do not apply more than once per season. Read "IMPORTANT" statement under "Recommended Applications" for ad- ditional information before use on this crop Do not feed vines or hay. Transplant Seed Beds: Apply evenly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 1.3 pints 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 emul- sion or with liquid fertilizer as an injection on each side of the specified dosage in a water emul- sing or with liquid fertilizer as an injected as a side-dressing after plants are established. Do not apply more than two field applica- tions yn or than two field applica- tions per season nor within 30 days of harvest for Brussels sprouts, or 40 days of harvest

RECOMMENDED APPLICATIONS (Continued)

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DI-SYSTON Liquid Concentrate

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RECOMMENDED APPLICATIONS (Continued)

		DOSAGE - DI-SYSTON	
CROP	INSECT	Liquid Concentrate	REMARKS
VEGETABLES (
Broccoli	Aphids Flea beetles Leafhoppers	1.5 fluid ounces per 1000 feet of row (for any row spacing*) - or-	Transplant Seed Beds: Apply even- ly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 1.3 pints per acre. Work into the top
Cabbage	Aphids Flea beetles	1.3 pints per acre (36 inch row spacing*)	2 to 3-inches of soil and plant seed in normal manner. <u>Field Applications</u> : Apply specified dosage in a water emulsion or
	Root aphids	2.2 fluid ounces per 1000 feet of row (for any row spacing*)	with liquid fertilizer as an in- jection on each side of the seed furrow or transplanted row at planting or injected as a side- dressing after plants are establi- shed. Do not apply directly on the seed. Do not apply more than one field application per season. Do not use within 14 days of har- vest for broccoli or 42 days of harvest for cabbage.
Lettuce	Aphids Leafhoppers Mites Thrips	fluid ounces per 1000 feet of row (for any row spacing*) or 1.3 to 2.6 pints per acre (20 inch row spacing)	Spring or Summer Seeded Lettuce: 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 Fall or Winter Seeded Lettuce: 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" state- ment under "Recommended Applications" for additional inform- ation before use on this crop.
Peas	Aphids Leafhoppers	1.3 to 3.3 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 (Continued)

CROP	INSECT	DOSAGE - DI-SYSTON Liquid Concentrate	REMARKS
VEGETABLES (0		Elgara concentrate	
Potatoes	Aphids	4 to 5-1/3 pints per acre	<u>SOIL APPLICATION - PRE-PLANT BROADCAST</u> : 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 two <u>soil</u> applications of DI-SYSTON per crop season regardless of method of ap- plication or formulation used. Do not tank mix this product with Phosalone.
	Aphids Flea beetles (except tuber flea		<u>SOIL APPLICATION - FURROW</u> : Apply undiluted in specifically designed equipment for low volume soil injec- tion, or apply in a water emulsion,
	beetles) Leafhoppers Potatc psyllid Southern potato wireworm	3 to 4.6 fl. ozs. per 1000 feet of row for any row spacing*. (for 38 inch row	or with liquid fertilizer as an in- furrow spray, or injection on each side of the seed furrow at planting. An <u>additional</u> side-dress application may be made as a water emulsion injec- tion after plants become established. Do not make more than two soil appli-
	Colorado potato beetle (early season reduction)	spacing use 2.6 to 4 pints per acre)	cations 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.
	Green peach aphids	1/2 to 1-1/3 pints per acre	FOLIAR APPLICATIONS: Apply specified dosage per acre in sufficient water to obtain thcrough 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. nade following <u>at-planting</u> soil treatment of for DI-SYSTON 15% Granular.

SPRINKLER IRRIGATION APPLICATION TO POTATOES:

For control of green peach aphid, and Colorado potato beetle on potatoes in the States of California, Oregon, Washington, Idaho, and Utah apply DI-SYSTON Liquid Concentrate at the rate of 1-1/3 to 4 pints per acre through sprinkler irrigation systems. Use only in solid set or center pivot systems equipped with automatic chutoff devices and values to prevent backflow into the water cource. Do not apply when wind velocit es exceed i0 mph.

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RECOMMENDED APPLICATIONS (Continued)

Up to 3 applications of the 1-1/3 pint per acre rate may be made but not within 30 days of harvest, or, only 1 application of rates above 1-1/3 pint per acre may be made but not within 60 days of harvest. Applications may be made following <u>at-planting</u> soil treatments as recommended on this label or on the label for DI-SYSTON 15% Granular. Do not tank mix this product with Phosalone.

<u>Solid Set Systems</u>: Apply specified dosage for the entire length of the irrigation period or for a 30 to 60 minute period at the end of a regular irrigation set or as a 30 to 60 minute injection as a separate application not associated with a regular irrigation. Allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining pesticide, a dye indicator may be injected into the lines to mark the end of the application period. See <u>Note</u>.

<u>Circular Systems</u>: Inject the specified dosage per acre continuously for one complete revolution of the system. See NOTE.

Sample Calculations:

<u>Center Pivot</u> Calibrations:

- (1) To apply DI-SYSTON Liquid Concentrate at the rate of 1-1/3 pints per acre to 130 acres you will need 130 x 1-1/3 pints or 173 1/3 pints (21 2/3 gallons) of product.
- (2) If your injection pump delivers 15 gallons per hour and your system takes 20 hours for 1 revolution, you will need to mix enough water with the DI-SYSTON Liquid Concentrate to obtain 300 gallons of emulsion.
- (3) Mix the required amounts of DI-SYSTON Liquid Concentrate and water in a nurse tank equipped with mechanical agitation, start the irrigation system and begin the injection.
- (4) Check frequently to insure all systems are functioning properly.

Solid Set Calibration:

- (1) Determine the area to be treated per irrigation set. If one set irrigates four 1/4 mile long lines on a 50' spacing, 4 x 1,320' x 50 feet = 264,000 square feet or approximately 6 acres.
- (2) If 1-1/3 pints of DI-SYSTON Liquid Concentrate is to be applied per acre, 6 x 1-1/3 or 8 pints (1 gallon) of DI-SYSTON Liquid Concentrate is needed.
- (3) Dilute with sufficient water so injection time will require approximately 30 minutes or more per set. Under no circumstances should injection be less than 10 minutes.
- (4) Repeat a plications until the entire field is treated.

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NOTE:

Apply the product only through systems containing anti-syphon and check valve which will prevent water source contamination and overflow of the slurry tank, and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off. Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Inject the product with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing.

Application of more than label recommended quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness. Do not apply when wind speed favors drift, when systems connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled or drained.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute slurry per hour. Where sprinkler distribution patterns do not overlap sufficiently, unacceptable insect control may result. Where sprinkler distribution patterns overlap excessively, crop injury may result.

Allow foliage to dry thoroughly before entering field. If there is a need to enter fields earlier wear protective clothing.

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RECOMMENDED APPLICATIONS (Continued)

LKUP	INSECT	DOSAGE - DI-SYSTON	DEMADUS
Tomatoes	Aphids Flea beetles Leafhoppers Leaf miners Mites Colorado potato beetle (early season reduc- tion)	Liquid Concentrate 1.6 to 4.6 fluid ounces per 1000 feet of row (for any row spacing*) or 1.3 to 4 pints per acre (38 inch row spacing)	REMARKS Transplant Seed Beds: Apply evenly over bed area in a water emulsion as a broad- cast spray prior to seeding at the rate of 4 pints 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 time. Do not apply directly on the seed. Where 2 field applications are required, use only 1.6 to 3.2 fluid ounces per 1000 feet of row, or 1.3 to 2.6 pints per acre, in- jected 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 bewteen applications. Do not apply within 30 days of harvest. (NOTE: Florida Only - Rates up to 14 fluid ounces per 1000 feet of row, with a 72-inch row spacing, may be applied to highly alkaline soils as an injec- tion on each side of the seed furrow or transplanted row at planting time only; or where 2 field applications are required, up to 7 fluid ounces per 1000 feet of row with a 72-inch row spacing, at planting time and up to 7 fluid ounces per 1000 feet of row as a side- dressing after plants become established Do not apply within 30 days of harvest). Read "IMPORTANT" statement under "Recommended Applications" for addi- tional information before use on this crop. OW, DO NOT PLACE TREATED ZONES (BAND OR

FURROW) CLOSER TOGETHER THAN 6 INCHES.

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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 specifie' 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 Liquid Concentrate on (date of application). Do not allow reentry into treated fields within 24 hours of application unless appropriate protective clothing is worn. If you 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.

<u>Container Disposal</u>: 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 ert to prevent leakage. If the container is leaking or material spilled for any reason of 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 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

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 cr smoking.

HANDLING OF CONTAMINATED ARTICLES: Clothing and rags receiving undiluted DI-SYSTON Liquid Concentrate 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 Liquid Concentrate 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.

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DI-SYSTON Liquid Concentrate

STATEMENTS OF PRACTICAL TREATMENI

<u>In case of poisoning</u>, call a physician immediately. Have patient lie down and keep quiet. <u>If wallowed</u>, 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. <u>Professional medical assistance should be secured immediately</u>. If on skin, remove contaminated clothing and wash skin immediately with soap and warm water. Get medical attention immediately. If <u>eyes are contaminated</u>, wash with plenty of flowing water. Get medical attention immediately.

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 cleaning of equipment or disposal o, wastes. 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.

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