

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Reg # 3125-172  
RM 15

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14 NOV 1984

305 / 132429  
17 / 5

G. E. Brussell  
Mobay Chemical Corp.  
Agriculture Chemicals Div.  
P.O. Box 4913  
Kansas City, MO 64120

Dear Mr. Brussell:

Subj: Amendment - Add More Restrictive Grazing Restriction  
DI-SYSTON 15% Granular  
EPA Reg. No. 3125-172  
Your Application Dated October 12, 1984

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (TS-767C)

CONCURRENCES

OL									

U.S. LABEL

Reason to Issue: To add grazing restrictions on alfalfa, peanuts, rice, sorghum, wheat & pecans.

Date of Draft: 10/5/84 (B)  
Supersedes Draft Dated: 9/30/83

EPA Reg. No. 3125-172-AA

® DI-SYSTON

15% GRANULAR

SYSTEMIC INSECTICIDE

FOR USE BY COMMERCIAL GROWERS OR PROFESSIONAL APPLICATORS  
NOT FOR HOME GARDEN USE

FOR EFFECTIVE SYSTEMIC CROP  
PROTECTION

NET WEIGHT POUNDS

## ACTIVE INGREDIENT:

O,O-Diethyl S- 2-(ethylthio)ethyl  
phosphorodithioate ..... 15%

DANGER  POISON

INERT INGREDIENTS: ..... 85%  
100%

KEEP OUT OF REACH OF CHILDREN  
(See Back Panel for Statements of  
Practical Treatment and Other  
Precautionary Statements)

EPA Reg. No. 3125-172-AA

STOP - READ THE LABEL BEFORE USE

## 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.)

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

NOV 14 1984

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

3125-172

MOBAY CHEMICAL CORPORATION  
AGRICULTURAL CHEMICALS DIVISION  
Box 4913, Kansas City, Missouri 64120

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

COPY

Pg 3 of 14  
3125-172  
1/19

DI-SYSTON 15% Granular

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 15% Granular.

**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 15% Granular systemic insecticide enters the plant through the root system. The insecticide when placed near the roots, is picked up and moves in the sap stream to all parts of the plant where it kills insects as they feed on the plant.

This formulation of DI-SYSTON 15% Granular is highly versatile and may be applied by various methods. It can be drilled in the furrow with seed, broadcast, or banded on each side of the seed furrow. Foliage broadcast application may be applied by ground or air equipment. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

As a preplant treatment for ornamental flowers, shrubs, and trees, apply granules evenly to seed bed and mix into soil; seeds or transplants are then placed in the normal manner. Established plants may be treated by distributing granules uniformly under foliage canopy. Mixing the granules into top soil and watering will accelerate entry into the plant, as the chemical will leach into the root zone and be taken up by the root system.

RECOMMENDED APPLICATIONS

**IMPORTANT:** When used on cotton, sugar beets, tomatoes, beans, or lettuce at the maximum recommended rates under adverse conditions such as extremely cool or wet or extremely dry weather, DI-SYSTON systemic insecticide 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 DISYSTON.

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<b>FIELD CROPS</b>			
Alfalfa	Aphids Mites	6.7 pounds per acre	Apply only one broadcast treatment but not within 28 days of grazing or cutting for forage. Make only one application per crop season.
Clover	Aphids Mites	6.7 pounds per acre	Apply by broadcast treatment as needed but not within 7 days of harvest or grazing. Allow a minimum of 28 days between applications.
Barley Oats	Aphids Mites	6.7 pounds per acre	Apply by drilling or broadcast at planting time, or as a broadcast after emergence. Do not apply more than twice per season nor within 60 days of harvest for grain. Allow a minimum of 21 days between applications. Do not graze or cut for forage within 30 days of treatment.

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS								
FIELD CROPS (Continued)											
Corn	Rootworms Aphids Leafhoppers Mites Thrips	8 ounces per 1000 feet of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)  NOTE: Do not apply to corn more than twice per season regardless of the method of application.	Corn Rootworms: For control of rootworms, place the granules in a 4- to 6-inch band directly behind the planter shoe in front of the press wheel. Do not place granules in direct contact with the seed. A second application of granules may be applied to the soil as a side-dress treatment later in the season. Aphids, Mites, Thrips, and Leafhoppers: For control of these insects apply granules to the soil as a side-dress treatment or to the foliage by broadcasting into the whorl. Do not apply DI-SYSTON 15% Granular within 40 days of harvesting for food, feed, or ensilage.								
	Cotton	Aphids Mites Thrips	At Planting: Place the granules in the seed furrow or in a band on each side of the furrow.  RATE CHART FOR PLANTING TIME APPLICATION <table><tr><th>Heavy Soils</th><th>Medium Soils</th><th>Light Soils</th></tr><tr><td>8 oz. 15% Gran./1000 ft. of row</td><td>6.6 oz. 15% Gran./1000 ft. of row</td><td>5 oz. 15% Gran./1000 ft. of row</td></tr><tr><td>6.7 lbs. 15% Gran./acre.</td><td>5.3 lbs. 15% Gran./acre.</td><td>4 lbs. 15% Gran./acre.</td></tr></table>	Heavy Soils	Medium Soils	Light Soils	8 oz. 15% Gran./1000 ft. of row	6.6 oz. 15% Gran./1000 ft. of row	5 oz. 15% Gran./1000 ft. of row	6.7 lbs. 15% Gran./acre.	5.3 lbs. 15% Gran./acre.
Heavy Soils			Medium Soils	Light Soils							
8 oz. 15% Gran./1000 ft. of row			6.6 oz. 15% Gran./1000 ft. of row	5 oz. 15% Gran./1000 ft. of row							
6.7 lbs. 15% Gran./acre.	5.3 lbs. 15% Gran./acre.	4 lbs. 15% Gran./acre.									
5 to 8 ounces per 1000 feet of row (for any row spacing*) or 4 to 6.7 pounds per acre (40 inch row spacing)	Post-Plant: (Irrigated Cotton Only) If an additional treatment is necessary make one side-dress application or a single broadcast application over the foliage. Rates up to 13.3 pounds per acre can be applied to first squaring cotton (90 days before harvest) and rates up to 6.7 pounds per acre can be applied to within 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.										
		2.5 to 3.3 ounces per 1000 feet of row (for any row spacing*) -or- 2 to 2.7 pounds per acre (40-inch row spacing)	HILL DROPPED COTTON: Apply specified dosage with the seed at planting. Use the lower rate where hill spacing is greater than 14 inches apart or where applications are made to light, sandy soils. Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.								

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
FIELD CROPS (Continued)			
Hops	Aphids Mites	12.3 to 26.7 pounds per acre (See Remarks)	Uniformly spread the granules in a 6 inch square area at the base of each plant. For standard 7 ft. by 7 ft. hopyard spacing, the recommended dosage is equal to 0.24 oz. (2 level teaspoonfuls) to 0.48 oz. (4 level teaspoonfuls) per plant. Apply in mid-to late June, just prior to hilling. Hilling operation should cover granules with soil. Irrigate as normal crop culture requires. Do not graze or feed crop refuse.
Peanuts	Aphids Leafhoppers Mites Thrips	7.4 to 14.7 ozs. per 1000 feet of row (for any row spacing*) -or- 6.7 to 13.3 lbs. per acre (36 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting, or as a side-dressing after plants are established. Do not apply directly on the seed. Where necessary, granules may be applied in a band over the row or as a side-dressing at pegging time. Do not feed treated vines.
Rice	Leafhoppers	13.3 lbs. per acre	Apply as a broadcast application at planting or prior to flooding. Do not apply more than twice per season nor within 100 days of harvest. Do not use straw for forage, fodder, or bedding purposes.
Sorghum	Aphids (Greenbugs) (See "NOTE" below)	6 to 8 ozs. per 1000 ft. of row (for any row spacing*) -or- 5 to 6.7 pounds per acre (40 inch row spacing)	<u>APPLICATION AT PLANTING: IN-FURROW</u> Place the granules in the seed furrow approximately 1/2 inch above the seed at planting. Do not apply directly on the seed. See "NOTE" below.
		8 ozs. per 1000 ft. of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)	<u>APPLICATION AT PLANTING: BAND</u> Place the granules 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. See "NOTE" below.
			<u>POST-PLANTING APPLICATION: WHORL</u> Apply specified dosage by broadcasting into the whorl. Do not apply more than 3 times per season nor within 30 days of harvest of grain or 45 days of harvest for forage or fodder. See "NOTE" below.
		<u>NOTE:</u> (1) Post-planting broadcast applications into the whorl may be made following an at-planting application. (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.	
Soybeans	Thrips (except flower thrips) Mexican bean beetle	6.7 pounds per acre (36 inch row spacing)	Place the granules in a 4 inch band over the seed furrow behind the planter shoe and in front of the press wheel or in a band on each side of the seed furrow at planting time. Do not apply directly on the seed.

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<b>FIELD CROPS (Continued)</b>			
Sugar Beets	Aphids Leafhoppers Mites	6 ounces per 1000 feet of row (for any row spacing*) or 6.7 lbs. per acre (30 inch row spacing)	Place the granules in the seed furrow 2 inches under the seed or in a band on each side of the seed furrow at planting; or apply to foliage and crown after emergence. Do not apply directly on the seed. Do not apply more than 3 times per season nor within 30 days of harvest. Allow a minimum of 21 days between applications. Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop.
Sugar Beets (North Dakota & Minnesota Only)	Root maggot	4.5 ozs. per 1000 feet of row (for any row spacing*) or 6.7 lbs. per acre (22 inch row spacing)	Apply in a 4 to 6 inch band directly behind the planter shoe in front of the press wheel. The granules should be placed approximately 1 inch above the seed. Do not allow granules to come into direct contact with the seed. Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop.
Tobacco	Aphids Flea beetles	<u>Transplant Beds:</u>  1 ounce per 100 square feet of bed	Apply evenly over bed area. Work the granules into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not make more than one application to transplant beds
		<u>Field Application:</u> 20 to 40 ounces per 1000 feet of row (for any row spacing*) -or- 13.3 to 26.7 lbs. per acre (broadcast or with 48 inch row spacing)	Apply in a 6- to 12-inch band over the row or as a broadcast treatment immediately before transplanting. Incorporate the granules by working them into the top 2 to 3 inches of soil. Plant crop in the usual way. Do not make more than one field application per crop season regardless of DI-SYSTON formulation used.
	Southern Potato wireworm	13.3 to 26.7 lbs. per acre	When applied as described for FIELD APPLICATION above, DI-SYSTON 15% Granular will aid in control of this wireworm.

## DI-SYSTON 15% Granular

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>FIELD CROPS (Continued)</u>			
Wheat (Fall)	Hessian fly Aphids (Greenbugs) (Oat bird cherry) Grasshoppers	6.7 lbs. per acre or 1.7 oz/1000 ft of row (see chart below)	Apply by drilling or broadcast at planting time in the fall. Make only one application and do not graze or cut for forage within 75 days of treatment. <u>NOTE:</u> Due to greenbug resistance in cer- tain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.
<u>SEED FIELD CROPS</u>			
Soybeans	Aphids Leafhoppers Mites Thrips	8 ounces per 1000 feet of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting or as a side- dressing after plants are established. Do not pasture or use treated crop for feed, food, or forage. Do not apply directly to seed.
<u>FRUIT</u>			
Coffee (Puerto Rico Only)	Leaf miner	2 to 4 grams per foot of tree height	Distribute granules uniformly under the tree canopy. Do not apply more than twice per year. Make no more than one pre-harvest and one post-harvest application. Do not make the pre-harvest application within 90 days of harvest.
Pineapple	Mealybug	16.7 lbs. per acre	Apply as a broadcast application, or topically by base leaf feeding after plants have devel- oped root systems. Repeat as necessary but not more than twice per crop period nor within 60 days of harvest. When two treatments are used, do not ensile foliage less than one year after last application.
<u>NON-BEARING FRUIT</u>			
Fruit Trees (apples, apricots, cherries, crab- apples, peaches, pears, plums, & prunes)	Aphids Lace bug Leafhoppers Mites Thrips Whiteflies	2.5 to 27 ounces per tree or 2.5 ounces per inch of trunk diameter	Spread granules uniformly from trunk to drip line on all sides. Work into soil and water thoroughly. The higher dosage is recommended for heavy organic or muck soils. For trans- planting, equivalent quantities should be applied into planting hole. Do not apply to trees that will bear fruit during current crop year.

## DI-SYSTON 15% Granular

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
NON-BEARING FRUIT (Continued)			
Straw-berries (Propagating Plants Only)	Aphids Mites (except cyclamen mite)	17 to 34.4 ozs. per 1000 feet of row (for any row spacing*) -or- 13.3 to 26.7 lbs. per acre (42 inch row spacing)	Apply by side-dressing on each side of the row or by broadcasting over the row as needed. Do not use fruit from treated plants for food purposes.
Rasp-berries (Nursery stock only) (Northeast States Only)	Aphids	53.3 lbs. per acre	<b>BAND APPLICATION:</b> Apply specified dosage in a 24-inch band over the row to new or established plantings. Work granules 2 to 3 inches into the soil using a cultivator or other suitable equipment. A second application of granules may be applied to the soil later in the season. Consult your State Agricultural Experiment Station or Extension Service for proper timing of applications.
<u>NUTS</u>			
Pecans (South Central & South-western States) (Note 1)	Aphids	10 to 20 pounds per acre	Apply by treating 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 granules into the upper 2 to 3 inches of soil. 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.
<u>VEGETABLES</u>			
Beans	Aphids Leafhoppers Mexican bean beetle (larvae) Mites Thrips	6 to 12 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 to 13.3 lbs. per acre (30 inch row spacing)	For snap or green Lima beans, place the granules in a band on each side of the seed furrow at planting time only. For dry beans, apply as above at planting time or 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. Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.
Brussels Sprouts	Aphids Flea beetles Leafhoppers Mites Thrips	7.4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 pounds per acre (36 inch row spacing)	<b>Transplant Seed Beds:</b> Apply granules evenly over bed area at the rate of 6.7 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment. <b>Field Applications:</b> Place the granules in a band on each side of the seed furrow or transplanted row at planting and where necessary as a side-dressing after plants become 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.
Cauliflower	Aphids Flea beetles Leafhoppers		



## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
VEGETABLES (Continued)			
Broccoli	Aphids Flea beetles Leafhoppers	7.4 ounces per 1000 feet of row (for any row spac- ing*) -or- 6.7 pounds per (36 inch row spac- ing)	<p><u>Transplant Seed Beds:</u> Apply granules evenly over bed area at the rate of 6.7 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment.</p> <p><u>Field Applications:</u> Place the granules as a band on each side of the seed furrow or transplanted row at planting or as a side-dressing after plants become 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.</p>
	Root aphid	11.3 ounces per 1000 feet of row (for any row spac- ing*)	
Lettuce	Aphids Leafhoppers Mites Thrips	4 to 8 ounces per 1000 feet of row (for any row spac- ing*) -or- 6.7 to 13.3 lbs. per acre (20 inch row spacing)	<p><u>Spring or Summer Seeded Lettuce:</u> Use the higher rate on heavy organic soils. Place the granules in a band on each side of the row at seeding time only. Do not apply directly on the seed. Do not apply to transplanted lettuce.</p> <p><u>Fall or Winter Seeded Lettuce:</u> Apply as a side-dressing 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.</p>
Peas	Aphids Leafhoppers	6.7 to 16.7 pounds per acre	Apply by drilling or broadcasting at planting time, or as a side-dress on each side of the row after emergence. Do not apply more than once per season nor within 50 days of harvest. Do not feed vines or hay within 65 days of treatment.

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>VEGETABLES (Continued)</u>			
Potatoes	Aphids Flea beetles (except tuber flea beetles) Leafhoppers Potato psyllid Southern potato wireworm Colorado potato beetle (early season reduction)	15 to 23 ounces per 1000 feet of row (for any row spacing*) -or- 13.5 to 20.5 pounds per acre (38 inch row spac- ing)	<u>ROW TREATMENTS</u> Place the granules in the seed furrow or in a band on each side of the seed furrow at planting. An additional application may also be made as a side-dressing after plants become established. Do not make more than two applications per season nor apply within 75 days of harvest. Higher rate to be used in organic soils. See <u>NOTE</u> below for "foliar applications".
		20 to 26.7 pounds per acre	<u>BROADCAST APPLICATION</u> Apply specified dosage per acre as a pre- plant broadcast application. Work granules into soil to a depth of 2 to 3 inches using a disc or other suitable equipment. Plant crop in usual manner. A post emergence side-dress may also be made at rates of 15 to 23 ounces per 1000 feet of row (for any row spacing*) after the plants become es- tablished. Do not make more than two appli- cations per season, nor apply within 75 days of harvest. See <u>NOTE</u> below for "foliar applications".
		<u>NOTE:</u> Foliar applications of DI-SYSTON 8 may be made in addition to an at-planting soil treatment. Refer to label for DI-SYSTON 8.	
Spinach	Aphids Leafhoppers Mites Thrips	4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 pounds per acre (20 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed.

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## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
VEGETABLES (Continued)			
Tomatoes	Aphids Flea beetles Leafhoppers Leaf miners Mites Colorado potato beetle (early season reduction)	8 to 23.4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 to 20 pounds per acre (38 inch row spacing)	<p><u>Transplant Seed Beds:</u> Apply granules evenly over bed area at the rate of 20 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment.</p> <p><u>Field Applications:</u> Apply specified dosage in a band on each side of the seed furrow or transplanted row at planting time and where necessary as a side-dressing after plants become established. Do not apply directly on the seed. Where two field applications are required, use only 8 to 15.5 ozs. per 1000 ft. of row, or 6.7 to 13.3 lbs. per acre, allow a minimum of 21 days between applications. Do not apply within 30 days of harvest. (NOTE: <u>Florida Only</u> - Rates up to 73.5 ozs. per 1000 feet of row, with a 72-inch row spacing may be applied to highly alkaline soils in a band on each side of the seed furrow or transplanted row at planting time only; or where 2 field applications are required, up to 36.7 ozs. per 1000 ft. or row, with a 72-inch row spacing at planting time, and up to 36.7 ozs. per 1000 ft. 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 additional information before use on this crop.</p>
ORNAMENTALS			
Flowers (Note 1)	Aphids Lace bug Leafhoppers Mites Thrips Whiteflies	10.7 ounces per 150 to 300 feet of row	<p>Apply in a band on each side of the seed furrow or as a band over the row. Work into soil and water thoroughly. For treatment of Easter lilies and gladiolus, apply the specified dosage in the furrow over the bulbs after they are set but before covering with soil. Do not make in-furrow applications to garden lily bulbs. The higher dosage is recommended for heavy organic or muck soils.</p>

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
ORNAMENTALS (Continued)			
	Aphids		
	Birch leaf miner		
	Camellia scale		
Shrubs	Elm leaf beetle	2.5 to 27 ounces per tree or	Spread granules uniformly from trunk to drip line on all sides. Work into soil and water thoroughly. The higher dosage is recommended for heavy organic or muck soils. For transplanting, equivalent quantities should be applied into planting hole or by dipping seedling in a puddling clay slurry made up of 1 part by weight of DI-SYSTON 15% Granular in 6 to 14 parts by weight of clay.
Trees	European elm scale	2.5 ounces per inch of trunk diameter	
Forest Plantings (Note 1)	Holly leaf miner		
	Lace bug		
	Leafhoppers		
	Mimosa webworm		
	Mites		
	Pine tip moth		
	Soft scale (Coccus hesperidum)		
	Tea scale		
	Thrips		
	Whiteflies		

Note 1: For use by commercial growers or professional applicators only.

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

## RESTRICTIONS

Not for home garden use. In commercial topping of flowers by hand, clean gloves should be worn. 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 crops grown in the greenhouse.

Do not apply this product with a knapsack or other equipment that is placed on the user's body.

## RE-ENTRY STATEMENT

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 enter treated areas without protective clothing until dusts have settled. 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 15% Granular on (date of application). Do not enter without appropriate protective clothing until dusts have settled. 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, 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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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 the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed 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

D A N G E R  P O I S O N

Poisonous if swallowed, inhaled, or absorbed through the skin. Rapidly absorbed through the skin. Do not get in eyes or on skin. Do not breathe dust. Wear protective clothing and cotton or natural rubber gloves. If cotton gloves are used, they must be laundered or discarded after each day's use. Do not wear the same gloves for other work. Rubber gloves should be washed with soap and water after each use.

When using DI-SYSTON 15% Granular insecticide in enclosed areas, wear a mask or 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. Wash all contaminated clothing with soap and hot water before reuse.

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

#### STATEMENTS OF PRACTICAL TREATMENT

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. If eyes are contaminated, wash with flowing water for at least 15 minutes.

#### 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 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 product is toxic to fish, birds, and other wildlife. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

DI-SYSTON is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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14 NOV 1984

305 / 132429  
17 / 5

G. E. Brussell  
Mobay Chemical Corp.  
Agriculture Chemicals Div.  
P.O. Box 4913  
Kansas City, MO 64120

Dear Mr. Brussell:

Subj: Amendment - Add More Restrictive Grazing Restriction  
DI-SYSTON 15% Granular  
EPA Reg. No. 3125-172  
Your Application Dated October 12, 1984

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

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

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

George T. LaRocca  
Product Manager (15)  
Insecticide-Rodenticide Branch  
Registration Division (TS-767C)

CONCURRENCES

OFFICIAL FILE COPY

BLD18

Base Reg. (5090)

U.S. LABEL

Reason to Issue: To add grazing restrictions on alfalfa, peanuts, rice, sorghum, wheat & pecans.

Date of Draft: 10/5/84 (B)  
Supersedes Draft Dated: 9/30/83

EPA Reg. No. 3125-172-AA

® DI-SYSTON

15% GRANULAR

SYSTEMIC INSECTICIDE

FOR USE BY COMMERCIAL GROWERS OR PROFESSIONAL APPLICATORS  
NOT FOR HOME GARDEN USE

FOR EFFECTIVE SYSTEMIC CROP  
PROTECTION

NET WEIGHT POUNDS

ACTIVE INGREDIENT:

O,O-Diethyl S-2-(ethylthio)ethyl  
phosphorodithioate ..... 15%

DANGER  POISON

INERT INGREDIENTS: ..... 85%  
100%

KEEP OUT OF REACH OF CHILDREN  
(See Back Panel for Statements of  
Practical Treatment and Other  
Precautionary Statements)

EPA Reg. No. 3125-172-AA

STOP - READ THE LABEL BEFORE USE

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.)

ACCEPTED  
with COMMENTS  
EPA Letter Dated:

NOV 14 1984

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

3125-172

MOBAY CHEMICAL CORPORATION  
AGRICULTURAL CHEMICALS DIVISION  
Box 4913, Kansas City, Missouri 64120

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



COPY

172

1009

DI-SYSTON 15% Granular

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 15% Granular.

**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 15% Granular systemic insecticide enters the plant through the root system. The insecticide when placed near the roots, is picked up and moves in the sap stream to all parts of the plant where it kills insects as they feed on the plant.

This formulation of DI-SYSTON 15% Granular is highly versatile and may be applied by various methods. It can be drilled in the furrow with seed, broadcast, or banded on each side of the seed furrow. Foliage broadcast application may be applied by ground or air equipment. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

As a preplant treatment for ornamental flowers, shrubs, and trees, apply granules evenly to seed bed and mix into soil; seeds or transplants are then placed in the normal manner. Established plants may be treated by distributing granules uniformly under foliage canopy. Mixing the granules into top soil and watering will accelerate entry into the plant, as the chemical will leach into the root zone and be taken up by the root system.

RECOMMENDED APPLICATIONS

**IMPORTANT:** When used on cotton, sugar beets, tomatoes, beans, or lettuce at the maximum recommended rates under adverse conditions such as extremely cool or wet or extremely dry weather, DI-SYSTON systemic insecticide 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 DISYSTON.

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<b>FIELD CROPS</b>			
Alfalfa	Aphids Mites	6.7 pounds per acre	Apply only one broadcast treatment but not within 28 days of grazing or cutting for forage. Make only one application per crop season.
Clover	Aphids Mites	6.7 pounds per acre	Apply by broadcast treatment as needed but not within 7 days of harvest or grazing. Allow a minimum of 28 days between applications.
Barley Oats	Aphids Mites	6.7 pounds per acre	Apply by drilling or broadcast at planting time, or as a broadcast after emergence. Do not apply more than twice per season nor within 60 days of harvest for grain. Allow a minimum of 21 days between applications. Do not graze or cut for forage within 30 days of treatment.

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS									
FIELD CROPS (Continued)												
Corn	Rootworms Aphids Leafhoppers Mites Thrips	8 ounces per 1000 feet of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)  NOTE: Do not apply to corn more than twice per season regardless of the method of application.	<u>Corn Rootworms:</u> For control of rootworms, place the granules in a 4- to 6-inch band directly behind the planter shoe in front of the press wheel. Do not place granules in direct contact with the seed. A second application of granules may be applied to the soil as a side-dress treatment later in the season. <u>Aphids, Mites, Thrips, and Leafhoppers:</u> For control of these insects apply granules to the soil as a side-dress treatment or to the foliage by broadcasting into the whorl. Do not apply DI-SYSTON 15% Granular within 40 days of harvesting for food, feed, or ensilage.									
	Cotton	Aphids Mites Thrips	5 to 8 ounces per 1000 feet of row (for any row spacing*) or 4 to 6.7 pounds per acre (40 inch row spacing)	<u>At Planting:</u> Place the granules in the seed furrow or in a band on each side of the furrow. RATE CHART FOR PLANTING TIME APPLICATION								
<table><tr><th>Heavy Soils</th><th>Medium Soils</th><th>Light Soils</th></tr><tr><td>8 oz. 15% Gran./1000 ft. of row</td><td>6.6 oz. 15% Gran./1000 ft. of row</td><td>5 oz. 15% Gran./ 1000 ft. of row</td></tr><tr><td>6.7 lbs. 15% Gran./acre.</td><td>5.3 lbs. 15% Gran./acre.</td><td>4 lbs. 15% Gran./acre</td></tr></table>				Heavy Soils	Medium Soils	Light Soils	8 oz. 15% Gran./1000 ft. of row	6.6 oz. 15% Gran./1000 ft. of row	5 oz. 15% Gran./ 1000 ft. of row	6.7 lbs. 15% Gran./acre.	5.3 lbs. 15% Gran./acre.	4 lbs. 15% Gran./acre
Heavy Soils				Medium Soils	Light Soils							
8 oz. 15% Gran./1000 ft. of row				6.6 oz. 15% Gran./1000 ft. of row	5 oz. 15% Gran./ 1000 ft. of row							
6.7 lbs. 15% Gran./acre.	5.3 lbs. 15% Gran./acre.	4 lbs. 15% Gran./acre										
<u>Post-Plant:</u> (Irrigated Cotton Only) If an additional treatment is necessary make one side-dress application or a single broadcast application over the foliage. Rates up to 13.3 pounds per acre can be applied to first squaring cotton (90 days before harvest) and rates up to 6.7 pounds per acre can be applied to within 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.												
<u>HILL DROPPED COTTON:</u> Apply specified dosage with the seed at planting. Use the lower rate where hill spacing is greater than 14 inches apart or where applications are made to light, sandy soils. Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.												

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
FIELD CROPS (Continued)			
Hops	Aphids Mites	13.3 to 26.7 pounds per acre (See Remarks)	Uniformly spread the granules in a 6 inch square area at the base of each plant. For standard 7 ft. by 7 ft. hopyard spacing, the recommended dosage is equal to 0.24 oz. (2 level teaspoonfuls) to 0.48 oz. (4 level teaspoonfuls) per plant. Apply in mid-to late June, just prior to hilling. Hilling operation should cover granules with soil. Irrigate as normal crop culture requires. Do not graze or feed crop refuse.
Peanuts	Aphids Leafhoppers Mites Thrips	7.4 to 14.7 ozs. per 1000 feet of row (for any row spacing*) -or- 6.7 to 13.3 lbs. per acre (36 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting, or as a side-dressing after plants are established. Do not apply directly on the seed. Where necessary, granules may be applied in a band over the row or as a side-dressing at pegging time. Do not feed treated vines.
Rice	Leafhoppers	13.3 lbs. per acre	Apply as a broadcast application at planting or prior to flooding. Do not apply more than twice per season nor within 100 days of harvest. Do not use straw for forage, fodder, or bedding purposes.
Sorghum	Aphids (Greenbugs) (See "NOTE" below)	6 to 8 ozs. per 1000 ft. of row (for any row spacing*) -or- 5 to 6.7 pounds per acre (40 inch row spacing)	APPLICATION AT PLANTING: IN-FURROW Place the granules in the seed furrow approximately 1/2 inch above the seed at planting. Do not apply directly on the seed. See "NOTE" below.
		8 ozs. per 1000 ft. of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)	APPLICATION AT PLANTING: BAND Place the granules 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. See "NOTE" below. POST-PLANTING APPLICATION: WHORL Apply specified dosage by broadcasting into the whorl. Do not apply more than 3 times per season nor within 30 days of harvest of grain or 45 days of harvest for forage or fodder. See "NOTE" below.
		NOTE: (1) Post-planting broadcast applications into the whorl may be made following an at-planting application. (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.	
Soybeans	Thrips (except flower thrips) Mexican bean beetle	6.7 pounds per acre (36 inch row spacing)	Place the granules in a 4 inch band over the seed furrow behind the planter shoe and in front of the press wheel or in a band on each side of the seed furrow at planting time. Do not apply directly on the seed.

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
FIELD CROPS (Continued)			
Sugar Beets	Aphids Leafhoppers Mites	6 ounces per 1000 feet of row (for any row spacing*) or 6.7 lbs. per acre (30 inch row spacing)	Place the granules in the seed furrow 2 inches under the seed or in a band on each side of the seed furrow at planting; or apply to foliage and crown after emergence. Do not apply directly on the seed. Do not apply more than 3 times per season nor with- in 30 days of harvest. Allow a minimum of 21 days between applications. Read " <u>IMPOR- TANT</u> " statement under "Recommended Applica- tions" for additional information before use on this crop.
Sugar Beets (North Dakota & Minnesota Only)	Root maggot	4.5 ozs. per 1000 feet of row (for any row spacing*) or 6.7 lbs. per acre (22 inch row spacing)	Apply in a 4 to 6 inch band directly behind the planter shoe in front of the press wheel. The granules should be placed approximately 1 inch above the seed. Do not allow granules to come into direct contact with the seed. Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop.
Tobacco	Aphids Flea beetles	<u>Transplant Beds:</u>  1 ounce per 100 square feet of bed	Apply evenly over bed area. Work the gran- ules into the top 2- to 3-inches of soil and seed beds in normal manner. An alter- native treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not make more than one application to transplant beds.
		<u>Field Application:</u> 20 to 40 ounces per 1000 feet of row (for any row spacing*) -or- 13.3 to 26.7 lbs. per acre (broad- cast or with 48 inch row spacing)	Apply in a 6- to 12-inch band over the row or as a broadcast treatment immediately before transplanting. Incorporate the gran- ules by working them into the top 2 to 3 inches of soil. Plant crop in the usual way. Do not make more than one field application per crop season regardless of DI-SYSTON for- mulation used.
	Southern Potato wireworm	13.3 to 26.7 lbs. per acre	When applied as described for FIELD APPLICA- TION above, DI-SYSTON 15% Granular will aid in control of this wireworm.

DI-SYSTON 15% Granular

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>FIELD CROPS (Continued)</u>			
Wheat (Fall)	Hessian fly Aphids (Greenbugs) (Oat bird cherry) Grasshoppers	6.7 lbs. per acre or 1.7 oz/1000 ft of row (see chart below)	Apply by drilling or broadcast at planting time in the fall. Make only one application and do not graze or cut for forage within 75 days of treatment. <u>NOTE:</u> Due to greenbug resistance in cer- tain areas, DI-SYSTON used alone may not provide satisfactory control. Consult your local agricultural advisor or Extension Service for recommendations.
<u>SEED FIELD CROPS</u>			
Soybeans	Aphids Leafhoppers Mites Thrips	8 ounces per 1000 feet of row (for any row spacing*) or 6.7 pounds per acre (40 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting or as a side- dressing after plants are established. Do not pasture or use treated crop for feed, food, or forage. Do not apply directly to seed.
<u>FRUIT</u>			
Coffee (Puerto Rico Only)	Leaf miner	2 to 4 grams per foot of tree height	Distribute granules uniformly under the tree canopy. Do not apply more than twice per year. Make no more than one pre-harvest and one post-harvest application. Do not make the pre-harvest application within 90 days of harvest.
Pineapple	Mealybug	16.7 lbs. per acre	Apply as a broadcast application, or topically to base leaf feeding after plants have devel- oped root systems. Repeat as necessary but not more than twice per crop period nor within 60 days of harvest. When two treatments are used, do not ensile foliage less than one year after last application.
<u>NON-BEARING FRUIT</u>			
Fruit Trees (apples, apricots, cherries, crab- apples, peaches, pears, plums, & prunes)	Aphids Lace bug Leafhoppers Mites Thrips Whiteflies	2.5 to 27 ounces per tree or 2.5 ounces per inch of trunk diameter	Spread granules uniformly from trunk to drip line on all sides. Work into soil and water thoroughly. The higher dosage is recommended for heavy organic or muck soils. For trans- planting, equivalent quantities should be applied into planting hole. Do not apply to trees that will bear fruit during current crop year.

## DI-SYSTON 15% Granular

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<b>NON-BEARING FRUIT (Continued)</b>			
Straw-berries (Propagating Plants Only)	Aphids Mites (except cyclamen mite)	17 to 34.4 ozs. per 1000 feet of row (for any row spacing*) -or- 13.3 to 26.7 lbs. per acre (42 inch row spacing)	Apply by side-dressing on each side of the row or by broadcasting over the row as needed. Do not use fruit from treated plants for food purposes.
Rasp-berries (Nursery stock only) (Northeast States Only)	Aphids	53.3 lbs. per acre	<b>BAND APPLICATION:</b> Apply specified dosage in a 24-inch band over the row to new or established plantings. Work granules 2 to 3 inches into the soil using a cultivator or other suitable equipment. A second application of granules may be applied to the soil later in the season. Consult your State Agricultural Experiment Station or Extension Service for proper timing of applications.
<b>NUTS</b>			
Pecans (South Central & South-western States) (Note 1)	Aphids	10 to 20 pounds per acre	Apply by treating 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 granules into the upper 2 to 3 inches of soil. 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.
<b>VEGETABLES</b>			
Beans	Aphids Leafhoppers Mexican bean beetle (larvae) Mites Thrips	6 to 12 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 to 13.3 lbs. per acre (30 inch row spacing)	For snap or green Lima beans, place the granules in a band on each side of the seed furrow at planting time only. For dry beans, apply as above at planting time or 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. Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.
Brussels Sprouts	Aphids Flea beetles Leafhoppers Mites Thrips	7.4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 pounds per acre (36 inch row spacing)	<b>Transplant Seed Beds:</b> Apply granules evenly over bed area at the rate of 6.7 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment. <b>Field Applications:</b> Place the granules in a band on each side of the seed furrow or transplanted row at planting and where necessary as a side-dressing after plants become 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.
Cauliflower	Aphids Flea beetles Leafhoppers		

## DI-SYSTON 15% Granular

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>VEGETABLES (Continued)</u>			
Broccoli	Aphids Flea beetles Leafhoppers	7.4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 pounds per (36 inch row spacing)	<p><u>Transplant Seed Beds:</u> Apply granules evenly over bed area at the rate of 6.7 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment.</p> <p><u>Field Applications:</u> Place the granules as a band on each side of the seed furrow or transplanted row at planting or as a side-dressing after plants become 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.</p>
	Root aphid		
Cabbage	Aphids Flea beetles	11.3 ounces per 1000 feet of row (for any row spacing*)	<p><u>Spring or Summer Seeded Lettuce:</u> Use the higher rate on heavy organic soils. Place the granules in a band on each side of the row at seeding time only. Do not apply directly on the seed. Do not apply to transplanted lettuce.</p> <p><u>Fall or Winter Seeded Lettuce:</u> Apply as a side-dressing 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.</p>
	Root aphid		
Lettuce	Aphids Leafhoppers Mites Thrips	4 to 8 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 to 13.3 lbs. per acre (20 inch row spacing)	
Peas	Aphids Leafhoppers	6.7 to 16.7 pounds per acre	Apply by drilling or broadcasting at planting time, or as a side-dress on each side of the row after emergence. Do not apply more than once per season nor within 50 days of harvest. Do not feed vines or hay within 65 days of treatment.

DI-SYSTON 15% Granular

RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>VEGETABLES (Continued)</u>			
Potatoes	Aphids Flea Beetles (except tuber flea beetles) Leafhoppers Potato psyllid Southern potato wireworm Colorado potato beetle (early season reduction)	15 to 23 ounces per 1000 feet of row (for any row spacing*) -or- 13.5 to 20.5 pounds per acre (38 inch row spac- ing)	<u>ROW TREATMENTS</u> Place the granules in the seed furrow or in a band on each side of the seed furrow at planting. An additional application may also be made as a side-dressing after plants become established. Do not make more than two applications per season nor apply within 75 days of harvest. Higher rate to be used in organic soils. See <u>NOTE</u> below for "foliar applications".
		20 to 26.7 pounds per acre	<u>BROADCAST APPLICATION</u> Apply specified dosage per acre as a pre- plant broadcast application. Work granules into soil to a depth of 2 to 3 inches using a disc or other suitable equipment. Plant crop in usual manner. A post emergence side-dress may also be made at rates of 15 to 23 ounces per 1000 feet of row (for any row spacing*) after the plants become es- tablished. Do not make more than two appli- cations per season, nor apply within 75 days of harvest. See <u>NOTE</u> below for "foliar applications".
		<u>NOTE:</u> Foliar applications of DI-SYSTON 8 may be made in addition to an at-planting soil treatment. Refer to label for DI-SYSTON 8.	
Spinach	Aphids Leafhoppers Mites Thrips	4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 pounds per acre (20 inch row spacing)	Place the granules in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed.

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## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
<u>VEGETABLES</u> (Continued)			
Tomatoes	Aphids	8 to 23.4 ounces per 1000 feet of row (for any row spacing*) -or- 6.7 to 20 pounds per acre (38 inch row spacing)	<u>Transplant Seed Beds:</u> Apply granules evenly over bed area at the rate of 20 pounds per acre. Work into the top 2- to 3-inches of soil and seed beds in normal manner. An alternative seed bed treatment may be made by broadcasting the granules evenly over the plants after emergence and watering thoroughly. Do not apply more than one seed bed treatment. <u>Field Applications:</u> Apply specified dosage in a band on each side of the seed furrow or transplanted row at planting time and where necessary as a side-dressing after plants become established. Do not apply directly on the seed. Where two field applications are required, use only 8 to 15.5 ozs. per 1000 ft. of row, or 6.7 to 13.3 lbs. per acre, allow a minimum of 21 days between applications. Do not apply within 30 days of harvest. (NOTE: <u>Florida Only</u> - Rates up to 73.5 ozs. per 1000 feet of row, with a 72-inch row spacing may be applied to highly alkaline soils in a band on each side of the seed furrow or transplanted row at planting time only; or where 2 field applications are required, up to 36.7 ozs. per 1000 ft. of row, with a 72-inch row spacing at planting time, and up to 36.7 ozs. per 1000 ft. of row as a side-dressing after plants become established. Do not apply within 30 days of harvest.) Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop.
	Flea beetles		
	Leafhoppers		
	Leaf miners		
	Mites		
	Colorado		
	potato		
	beetle		
	(early		
	season		
reduction)			
<u>ORNAMENTALS</u>			
Flowers (Note 1)	Aphids	10.7 ounces per 150 to 300 feet of row	Apply in a band on each side of the seed furrow or as a band over the row. Work into soil and water thoroughly. For treatment of Easter lilies and gladiolus, apply the specified dosage in the furrow over the bulbs after they are set but before covering with soil. Do not make in-furrow applications to garden lily bulbs. The higher dosage is recommended for heavy organic or muck soils.
	Lace bug		
	Leafhoppers		
	Mites		
	Thrips		
	Whiteflies		

## DI-SYSTON 15% Granular

## RECOMMENDED APPLICATIONS (Continued)

CROP	INSECT	DOSAGE DI-SYSTON 15% Granular	REMARKS
ORNAMENTALS (Continued)			
Shrubs Trees Forest Plant- ings (Note 1)	Aphids	2.5 to 27 ounces per tree or 2.5 ounces per inch of trunk diameter	Spread granules uniformly from trunk to drip line on all sides. Work into soil and water thoroughly. The higher dosage is recommended for heavy organic or muck soils. For transplanting, equivalent quantities should be applied into planting hole or by dipping seedling in a puddling clay slurry made up of 1 part by weight of DI-SYSTON 15% Granular in 6 to 14 parts by weight of clay.
	Birch leaf miner		
	Camellia scale		
	Elm leaf beetle		
	European elm scale		
	Holly leaf miner		
	Lace bug		
	Leafhoppers		
	Mimosa web-worm		
	Mites		
	Pine tip moth		
	Soft scale (Coccus hesperidium)		
	Tea scale		
	Thrips		
	Whiteflies		

Note 1: For use by commercial growers or professional applicators only.

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

## RESTRICTIONS

Not for home garden use. In commercial topping of flowers by hand, clean gloves should be worn. 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 crops grown in the greenhouse.

Do not apply this product with a knapsack or other equipment that is placed on the user's body.

## RE-ENTRY STATEMENT

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 enter treated areas without protective clothing until dusts have settled. 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 15% Granular on (date of application). Do not enter without appropriate protective clothing until dusts have settled. 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, 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: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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 the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed 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 or on skin. Do not breathe dust. Wear protective clothing and cotton or natural rubber gloves. If cotton gloves are used, they must be laundered or discarded after each day's use. Do not wear the same gloves for other work. Rubber gloves should be washed with soap and water after each use.

## DI-SYSTON 15% Granular

When using DI-SYSTON 15% Granular insecticide in enclosed areas, wear a mask or 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. Wash all contaminated clothing with soap and hot water before reuse.

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

## STATEMENTS OF PRACTICAL TREATMENT

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. If eyes are contaminated, wash with flowing water for at least 15 minutes.

## 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 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 product is toxic to fish, birds, and other wildlife. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.

DI-SYSTON is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.