

655 / 159442
17

MAR - 1 1989

Mr. John S. Thornton
Mobay Corporation
Agricultural Chemicals Division
P.O. Box 4913
Kansas City, MO 64120-0013

Dear Mr. Thornton:

Subject: Amendment - Response to Disulfoton Registration Standard
Di-Syston 2% Granular Systemic Insecticide
EPA Registration No. 3125-83
Your Application Dated July 25, 1985

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

1. The word "Disulfoton" should precede the chemical name in the ingredients statement.
2. In the Note to Physician, change the chemical name to "Disulfoton."
3. Under the Environmental Hazards statement, change "cleaning of equipment or disposal of wastes" to "disposing of equipment washwaters."
4. In the Reentry Statements section, the "If eyes are contaminated" statement should read "Flush eyes with plenty of water. Call a physician if irritation persists."
5. Revise the pesticide disposal statement in accordance with PR Notice 83-3. Disulfoton is considered a "Hazardous Waste" under Sections 261.33(e) and (g) of Title 40 of the Code of Federal Regulations when discarded and the product is also assigned Toxicity Category II on the basis of acute inhalation toxicity.
6. You may delete the crop rotation statement.

50715:I:Richards:LR-9:KENCO:2/24/89:4/6/89:AS:VO:EK:CT

CONCURRENCES

SYMBOL							
SURNAME							
DATE							

7. Revise the statements to read:

May be fatal if swallowed or inhaled. Rapidly absorbed through skin. Do not breathe dust. Do not get in eyes, on skin or clothing. Wear rubber gloves when applying this product.

Provide the specification sheets for the clay and specify the type clay used in this product.

Please submit a new Confidential Statement of Formula that includes the certified limits.

You are reminded that this product must be child-resistant packaging.

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

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

Sincerely yours,

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

Enclosure

3069

5LD34

Base Reg. (5192)

U.S. LABEL-(S)

Reason to Issue: To update according to Label Improvement Program, and re-registration standard for disulfoton.

Date of Draft: 3/15/85 (S)
Supersedes Draft Dated: 5/11/81

EPA Reg. No. 3125-83

® DL-SYSTON

2Z Granular

SYSTEMIC INSECTICIDE

FOR USE IN POTTED HOUSEPLANTS, AROUND HOMES, AND IN AND AROUND GARDENS

NET WEIGHT

POUNDS

ACTIVE INGREDIENT:

O,O-Diethyl S-[2-(ethylthio)-ethyl] phosphorodithioate 2Z

KEEP OUT OF REACH OF CHILDREN

INERT INGREDIENTS: 98%
100%

WARNING

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

EPA Reg. No. 3125-83
EPA Est. 3125-IA-1

ACCEPTED
with COMMENTS
EPA Letter Dated:

MAR - 1 1989

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

3125-83

STOP - READ THE LABEL BEFORE USE

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.

4.792

DI-SYSTON 2Z Granular

AVISO

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.)

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 2Z Granular systemic insecticide.

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

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

The formulation of DI-SYSTON 2Z Granular is highly versatile and offers many forms of application. It can be drilled, broadcast, mixed with soil, or banded in the furrow with seeds, bulbs, or transplants. Side-dressings can be applied after plant emergence. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

As a pre-plant treatment for ornamental flowers and shrubs, apply granules evenly to seed bed and mix into soil; seeds or transplants are then placed in the normal manner. Established plants may be side-dressed by applying granules uniformly under foliage canopy. Mixing the granules into top soil and watering will assist entry into the plant, as the chemical will leach into the root zone for absorption.

DI-SYSTON 2% Granular

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 2% Granular	REMARKS
VEGETABLES			
Beans	Aphids Leafhoppers Mexican bean beetle (larvae) Mites Thrips	2.5 to 4.5 ounces per 50 feet of row (for any row spacing*) - or - 55 to 100 pounds per acre (30 inch row spacing)	For snap or green Lima beans place 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.
Brussels Sprouts	Aphids Leafhoppers Mites Thrips	2 1/2 ounces per 50 feet of row (for any row spacing*) - or - 45 pounds per acre (36 inch row spacing)	Place granules in a band on each side of the seed furrow at planting time, or as a side-dress after emergence. Do not apply directly on the seed. When it is desirable to treat individual plants, apply 1 level teaspoonful DI-SYSTON 2% Granular per plant in the trans-plant hole. Mix granules with soil in hole prior to setting plant. Do not apply more than twice per season nor within 30 days of harvest for Brussels sprouts or 40 days of harvest for cauliflower.
Cauliflower	Aphids Flea beetles Leafhoppers		
Broccoli	Aphids Leafhoppers	2 1/2 ounces per 50 feet of row (for any row spacing*) -or- 45 pounds per acre (36 inch row spacing)	Place granules in a band on each side of the seed furrow at planting or as a side dressing after plants become established. Do not apply directly on the seed. When it is desirable to treat individual plants apply 1 level teaspoonful DI-SYSTON 2% Granular per plant in the transplant hole. Mix granules with soil in hole prior to setting plant. Make only 1 application per season. Do not use within 42 days of harvest for cabbage or 14 days of harvest for broccoli.
Cabbage	Aphids		
Lettuce	Aphids Leafhoppers Mites Thrips	2 to 3 ounces per 50 feet of row (for any row spacing*) -or- 65 to 100 pounds per acre (20 inch row spacing)	Place granules in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed.
Peas	Aphids Leafhoppers	2 1/2 ounces per 50 feet of row (for any row spacing*) -or- 90 pounds per acre (18 inch row spacing)	Place granules in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed.

6069

DI-SYSTON 2% Granular

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 2% Granular	REMARKS
Potatoes	Aphids Flea beetles Leafhoppers Potato psyllid	6 to 9 ounces per 50 feet of row (for any row spacing*) -or- 100 to 150 pounds per acre (38 inch row spacing)	Place granules in the seed furrow at planting or by side-dress, either alone or with fertilizer. Do not apply within 75 days of harvest. Do not mix this product with Phasolone
Spinach	Aphids Leafhoppers Leaf miners Mites Thrips	1 1/2 ounce per 50 feet of row (for any row spacing*) -or- 50 pounds per acre (20 inch row spacing)	Place granules in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed.
Tomatoes	Aphids Flea beetles Leafhoppers Leaf miners Mites	6 to 9 ounces per 50 feet of row (for any row spacing*) -or- 100 to 150 pounds per acre (38 inch row spacing)	Apply in a band on each side of the seed furrow at planting time only. Do not apply directly on the seed. When it is desirable to treat individual plants, apply 2 level teaspoonfuls DI-SYSTON 2% Granular per plant in the transplant hole. Mix granules with soil in hole prior to setting plant. If 2 applications are needed, use only 6 ounces per 50 feet of row per treatment applied in a band on each side of the seed furrow at planting time and as a side-dress after emergence. Do not apply within 30 days of harvest.
<u>ORNAMENTALS</u> Flowers	Aphids Lace bug Leafhoppers Mites Thrips White flies	8 to 16 ounces per 30 feet of row (for any row spacing*)	Apply specified dosage in the furrow or as a band over the row. Work into soil and water thoroughly. The higher dosages are recommended for heavy organic or muck soil. For bedding plants apply 16 ounces of 2% Granular per 200 square feet worked into soil before planting or as a broadcast treatment after plants are established. Repeat applications at 4- to 6-week intervals if necessary. For application to potted plants including houseplants, use 1 rounded teaspoonful DI-SYSTON 2% Granular per 6-inch pot. Mix thoroughly with soil and drench with water.

DI-SYSTON 2% Granular

RECOMMENDED APPLICATIONS

CROP	INSECT	DOSAGE DI-SYSTON 2% Granular	REMARKS
Shrubs	Aphids Birch leaf miner Camellia scale Holly leaf miner Lace bug Leafhoppers Mimosa webworm Mites Pine tip moth Soft Scale (Coccus hesperidium) Tea scale Thrips White flies	(See Remarks)	Apply 2 to 4 rounded tablespoonfuls per foot of shrub height. For shrubs 1-3 feet tall apply the lower rate and on plants 3-6 feet in height apply the higher rate. Distribute the granules uniformly under the shrub canopy, work into the soil, and water thoroughly. Repeat applications at 4- to 6-week intervals if necessary.

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

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING**

Poisoning may occur as a result of exposure. May be fatal if swallowed. May be absorbed through skin. Do not breathe dust. Do not get in eyes, on skin or on clothing.

Do not contaminate feed or food. Keep out of reach of children. Wash thoroughly after handling. Food utensils such as a teaspoon or measuring cup should not be used for food purposes after use with insecticides. Keep children and pets off treated areas until product is worked into the soil and the treated areas have dried completely.

STATEMENTS OF PRACTICAL TREATMENT

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. Repeat until vomit fluid is clear. Never give anything by mouth to an unconscious person. Have patient lie down and keep quiet. Professional medical assistance should be secured immediately.

If inhaled, remove victim to fresh air. Apply artificial respiration if indicated. If on skin, remove contaminated clothing and wash affected areas with soap and water. If in eyes, flush eyes with plenty of water. Call a physician if irritation persists.

Note to Physician: O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate is a cholinesterase inhibitor. Atropine sulfate is antidotal only if signs of cholinesterase inhibition are present. 2-PAM is also antidotal and may be administered in conjunction with atropine.

DI-SYSTON 2Z Granular

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 of 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.

CROP ROTATION STATEMENT

Do not plant any food or feed crop in rotation after a field treatment with disulfoton unless it is a registered use for disulfoton.

RE-ENTRY STATEMENTS

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.

(If the product is to be labeled for use by farmworkers, the following must appear on the label)

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: **WARNING, area treated with DI-SYSTON 2Z Granular** on (date of application). Do not enter without appropriate protective clothing for 24 hours after application. 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

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

Household: Do not reuse empty container. Securely wrap original container in several layers of newspaper and put in trash collection.

Pesticide Disposal (Except Household): Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal (Except Household):

Paper bag - 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.

STORAGE AND DISPOSAL

Plastic - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or 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 800-424-9306.

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