

2001/2002

DI-SYSTON 15 G

DI-SYSTON[®]

15% Granular SYSTEMIC INSECTICIDE

FOR SYSTEMIC CROP PROTECTION

Contains disulfoton

RESTRICTED

GUARANTEE: Disulfoton 15%

REGISTRATION NO. 9519 PEST CONTROL PRODUCTS ACT



DANGER

POISON

KEEP OUT OF REACH OF CHILDREN

CALL A DOCTOR IN CASE OF ACCIDENT

READ THE LABEL BEFORE USING

NET CONTENTS 20 KILOGRAMS

Bayer 

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~~Crop Protection~~
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~~Toronto, Ontario, Canada M9W 1G6~~

Bayer Cropscience
Inc.
Suite 100
3131-114th Ave. S.E.
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Notification Change

NOTICE TO USER: This control product is to be used only in accordance with the directions on this label. It is an offense under the PEST CONTROL PRODUCTS ACT to use a control product under unsafe conditions.

NATURE OF RESTRICTION: This product is to be **stored, displayed and distributed** apart from food for humans or feed for animals.

DIRECTIONS FOR USE

DI-SYSTON 15% Granular is a systemic insecticide that 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.

DI-SYSTON 15% Granular formulation 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 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 tomatoes, beans, or lettuce at the maximum recommended rate 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 preemergent herbicides are used in conjunction with DI-SYSTON.

| CROP | INSECT | DOSAGE DI-SYSTON 15% G | REMARKS |
|-------------------------------|-----------------|--|---|
| FIELD CROPS Barley Oats | Aphids Mites | 7.5 kg/ha | 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. Allow a minimum of 21 days between applications. Do not graze or cut for forage within 30 days of treatment. |
| Corn | Rootworms | 75 g/100 m of row (for any row spacing*) - or - 7.5 kg/ha (100 cm row spacing) | Treatment at Planting Time: Place the granules in a 10 to 15 cm band directly behind the planter shoe in front of the press wheel. Do not forage or cut treated corn for feed or ensilage within 40 days of planting. Do not harvest for human food purposes within 100 days of treatment. |

RECOMMENDED APPLICATIONS

| CROP | INSECT | DOSAGE DI-SYSTON 15% G | REMARKS |
|---|--|---|--|
| FIELD CROPS CON'D Wheat (Fall) | Hessian fly | 7.5 kg/ha | Apply by drilling or broadcast at planting time in the fall. |
| NON-BEARING FRUIT Fruit Trees | Aphids Birch leaf miner Lace bug Mites | 70 to 765 g per tree - or - 28 g/cm 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. |
| Strawberries (Propagating Plants Only) | Aphids Two-spotted spider mite | 175 to 325 g/100 m of row (for any row spacing*) - or - 15 to 30 kg/ha (100 cm row spacing) | Apply by side-dressing on each side of the row or by broadcasting over the row as needed. Irrigate immediately after treatment for more rapid control. Do not use fruit from treated plants for food purposes. |
| VEGETABLES Beans | Aphids Leafhoppers Mexican bean beetle (larvae) Mites Thrips | 55 to 100 g/100 m of row (for any row spacing*) - or - 7.5 to 15 kg/ha (75 cm row spacing) If grain drills or similar equipment are used which gives narrow row spacing, do not exceed the 15 kg/ha rate. | 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 " <u>IMPORTANT</u> " statements under "Recommended Applications" for additional information before use on this crop. |
| Broccoli Cabbage | Aphids Flea beetles | 70 g/100 m of row (for any row spacing*) - or - 7.5 kg/ha (90 cm row spacing) | Place the granules as 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. Do not apply more than once per season. Do not use within 42 days of harvest. |
| Brussels Sprouts Cauliflower | Aphids Flea beetles Leafhoppers | 70 g/100 m of row (for any row spacing*) - or - 7.5 kg/ha (90 cm row spacing) | Place the 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. Do not apply more than twice per season nor within 30 days of harvest. Allow a minimum of 21 days between applications. |
| Lettuce | Aphids Leafhoppers | 37.5 to 75 g/100 m of row (for any row spacing*) - or - 7.5 to 15 kg/ha (50 cm row spacing) | 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. Read " <u>IMPORTANT</u> " statement under "Recommended Applications" for additional information before use on this crop. |

RECOMMENDED APPLICATIONS

| CROP | INSECT | DOSAGE DI-SYSTON 15% G | REMARKS |
|-----------------------------|--|--|--|
| VEGETABLES CON'D Peas | Aphids Leafhoppers | 7.5 to 17.5 kg/ha | 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. |
| Eggplant Peppers | Aphids Flea beetles Leafhoppers | 75 to 150 g/100 m of row (for any row spacing*) - or - 7.5 to 15 kg/ha (100 cm row spacing) | Place the 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. Do not apply more than once per season nor within 90 days of harvest. |
| Potatoes | Aphids (New Brunswick only) ^λ | 75 g/100 of row (for any row spacing*) - or - 7.75 kg/ha (100 cm row spacing) | Place the granules in the seed furrow or in a band on each side of the seed furrow at planting. Applications may also be made as a side-dressing either alone or with fertilizer after plants become established. Do not apply within 90 days of harvest. Higher rate to be used in organic soils. |
| | Aphids (all areas except New Brunswick) ^λ Colorado potato beetle (early season reduction) Leafhoppers Potato flea beetle (except tuber flea beetles) Potato psyllid | 150 to 200 g/100 of row (for any row spacing*) - or - 15 to 22.5 kg/ha (100 cm row spacing) | |
| Spinach | Aphids Leafhoppers Leaf miners Mites | 37.5 g/100 m of row (for any row spacing*) - or - 7 kg/ha (50 cm 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. |
| Tomatoes | Aphids Flea beetles Leafhoppers | 75 to 150 g/100 m of row (for any row spacing*) - or - 7.5 to 15 kg/ha (100 cm spacing) | Apply in a band on each side of the seed furrow at planting time and where necessary, as a side-dressing after plants become established. Do not apply directly on the seed. Allow a minimum of 21 days between applications. Do not apply within 30 days of harvest. Read " IMPORTANT " statement under "Recommended Applications" for additional information before use on this crop. |
| | Colorado potato beetle (early season reduction) | 150 g/100 m of row (for any row spacing*) - or - 15 kg/ha (100 cm row spacing) | |

^λ Use of DI-SYSTON on potatoes at the 7.75 kg/ha rate in New Brunswick only will not appear on the printed label.

RECOMMENDED APPLICATIONS

| CROP | INSECT | DOSAGE DI-SYSTON 15% G | REMARKS |
|---|---|--|---|
| ORNAMENTALS Flowers (Note 1) | Aphids Lace bug Leafhoppers Mites Thrips Whiteflies | 325 to 675 g/100 m of row | (OUTDOOR USE ONLY) 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. |
| Shrubs Trees Forest Plantings (Note 1) | Aphids Birch leaf miner Lace bug Leafhoppers Mimosa webworm Mites Pine tip moth Thrips Whiteflies | 70 to 765 g/tree - or - 28 g/cm 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% in 6 to 14 parts by weight of clay. |
| Spruce and Pine Seedlings in Nurseries | Strawberry Root Weevil | 16 kg/ha | Apply prior to transplanting in a uniform broadcast treatment over the transplant bed and incorporate immediately into the soil. Incorporate with standard incorporation equipment in a manner similar to current herbicide incorporation methods, i.e., the incorporation method should result in DI-SYSTON 15% Granular being incorporated in the top 4 cm of soil. Avoid contact of bare hands with treated soil when transplanting seedlings. If contact cannot be avoided, wear rubber gloves. |

Note 1: For use by commercial growers only.

*ON ROW CROPS WHERE ROW SPACING IS EXTREMELY NARROW, DO NOT PLACE TREATED ZONES (BAND OR FURROW) CLOSER TOGETHER THAN 15 CENTIMETRES.

PRECAUTIONS

Not for home garden use. Do not use in greenhouse, indoors or on soil for indoor 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. To protect fish and wildlife, do not contaminate streams, lakes, or ponds.

DANGER

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 handling DI-SYSTON 15% Granular in enclosed areas, wear a mask or respirator effective for protection against DI-SYSTON. Information as to suitable types of masks or respirators is available from your dealer.

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.

FIRST AID: In case of poisoning, call a physician or poison control centre immediately. Have patient lie down and keep quiet. **If swallowed**, vomiting should be induced. Administer water freely and induce vomiting by giving one dose (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. The patient should be lying down with the head below the foot level and facing down or to one side. Professional medical assistance should be secured immediately. **DO NOT INDUCE VOMITING TO AN UNCONSCIOUS PERSON OR TO PERSONS IN A CONVULSIVE STATE.** **If on skin**, remove contaminated clothing and wash skin immediately with soap and warm water. **If eyes are contaminated**, wash immediately with flowing water for at least 15 minutes.



POISON



TOXICOLOGICAL INFORMATION:

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

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. Disulfoton 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.

DISPOSAL

1. Completely empty the container into application equipment.
2. Follow Provincial instructions for any additional cleaning of the container prior to its disposal.
3. Do not reuse container. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with Provincial requirements.
5. For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the Manufacturer.

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| <p>NOTICE TO BUYER: Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.</p> |
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