



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number:
264-734

Date of Issuance:

MAY 22 2007

Term of Issuance: Unconditional

Name of Pesticide Product:
DI-SYSTON 8 Emulsifiable
Insecticide

NOTICE OF PESTICIDE:
_ Registration
x Reregistration
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Bayer Crop Science
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Reregistration Eligibility Decision, EPA has reregistered the product listed above. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Generic data requirements that have been identified in the RED as confirmatory data for the active ingredient contained in the subject product will continue to be tracked and assessed in the Agency's continual reassessment of pesticides.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided you make the following changes:

1. In the Restricted Use block, expand the reason for restricted use, i.e., "Due to acute oral, dermal, inhalation, eye, and skin toxicity."
2. Under the ingredients statement add "Contains petroleum distillates."

Signature of Approving Official:

Date:

MAY 22 2007

3. In the If Swallowed advice in FIRST AID, replace "Have person sip a glass of water if able to swallow." with "Do not give any liquid to the person.". If you have data or information to show there is a benefit in drinking water or milk you can retain the statement.
4. At the end of the paragraph beginning "Compound inhibits cholinesterase..." add: "This product also contains petroleum distillates, which may pose an aspiration pneumonia hazard. Probable mucosal damage may contraindicate the use of gastric lavage."
5. Revise the HAZARDS TO HUMANS AND DOMESTIC ANIMALS text to read:

Fatal if swallowed, inhaled, or absorbed through skin. Corrosive. Causes irreversible eye damage. Rapidly absorbed through skin. Causes skin burns. Do not get in eyes, on skin, or on clothing. Do not breathe fumes or spray mist. Wear the Personal Protective Equipment (PPE) specified below. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse.
6. Revise "Personal Protective Equipments" to "Personal Protective Equipment".
7. Revise "Protective eyewear" to read "Protective eyewear (goggles, face shield, or safety glasses)".
8. Replace "A NIOSH-approved dust mist filtering respirator with any R, P, or HE filter" with "A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G). or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter".
9. In both the emergency equipment sections of the ENGINEERING CONTROLS text, replace "a NIOSH-approved dust-mist filtering respirator with any R, P, or HE filter." with "A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G). or a NIOSH-approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter".
10. Since there are no general application restrictions, and since there are 24Cs for this product that permit aerial application, add the following to the end of the ENGINEERING CONTROLS section: "For aerial application, pilots must use an enclosed cockpit in a manner that is consistent with the WPS or Agricultural Pesticides [40 CFR 170.240(d)(4)]. Human flagging is prohibited. Use mechanical flaggers or global positioning system (GPS) equipment".
11. In the RESTRICTIONS, replace "Not for home garden use." with "Not for residential use."

12. Directly under the heading DIRECTIONS FOR USE, add "RESTRICTED USE PESTICIDE".
13. For each vegetable crop REMARKS entry where the term "per season" is used, replace that with the term "per year".
14. For broccoli, Brussels sprouts, and cauliflower, add "Apply by shank injection only.". Any conflicting text must be removed (i.e., remove chemigation directions and remove broadcast spray to transplant seed beds). Add "Do not apply by chemigation.".
15. For Easter Lilies, revise the limitation to read "Maximum number of applications: 1 per year.".
16. In the first and last sentence of the DISCLAIMER OF WARRANTIES, add "To the extent permitted under state law" before "BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES..." and "BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY...". Also, under "CONDITIONS" change "should" to "must" in the first sentence.

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

You may distribute products bearing old labels/labeling for 12 months from receipt of this letter or your next printing of the label, which ever occurs first.

Regarding the Special Local Need registrations associated with this parent product registration the Agency has the following comments on the revised labeling submitted in connection with registration under FIFRA section 24(c) and in response to the RED:

CA 810044 (lettuce) - Add the RESTRICTED USE block above the "FOR DISTRIBUTION AND USE ..." line. Include "Due to acute oral, dermal, inhalation, eye, and skin toxicity." as the reason for the classification. In the Notes section, before "Do not use within 60 days of harvest." add "Application to transplanted lettuce is prohibited. Do not apply more than one time per calendar year.". Also in the Notes section add "Do not apply directly on the seed.".

CA 840192 (asparagus)- Add the RESTRICTED USE block above the "FOR DISTRIBUTION AND USE ..." line. Include "Due to acute oral, dermal, inhalation, eye, and skin toxicity." as the reason for the classification. Replace "Restricted Entry Interval (REI): 26 days" with "Do not enter or allow workers to enter into treated areas during the restricted entry interval (REI). The REI is 11 days". Add "For aerial application, human flaggers are prohibited. Use mechanical flaggers or global positioning system (GPS) equipment.". Replace "Do not apply within 30 days of harvest" with "Allow at least 6 months between the last application and harvest.", then add "Do not apply to asparagus grown for seed..".

CA 050010 (Easter Lilies)- Relocate the RESTRICTED USE block above the "FOR DISTRIBUTION AND USE ..." line. In the RESTRICTED USE block, revise the reason for classification to read "Due to acute oral, dermal, inhalation, eye, and skin toxicity.". Revise the limitation to read "Maximum number of applications: 1 per year". For clarity, retain the first REI sentence ("Do not enter...") but replace the remaining REI text with "The REI is 48 hours, but is increased to 72 hours for areas where average rainfall is less than 25 inches per year." . At the end of the mixers and loaders paragraph, replace "etc" with "and PPE including coveralls, chemical resistant footwear, chemical resistant headwear (if overhead exposure), and a NIOSH-approved dust-mist filtering respirator with any R, P or HE filter."

MI 060002 (asparagus)- In the RESTRICTED USE block, revise the reason for classification to read "Due to acute oral, dermal, inhalation, eye, and skin toxicity.". In the RESTRICTIONS , revise the REI to read "11 days". In the RESTRICTIONS, revise the PHI statement to read "Allow at least 6 months between the last application and harvest.". As the last bullet item in the RESTRICTIONS, add "For aerial application, human flaggers are prohibited. Use mechanical flaggers or global positioning system (GPS) equipment.". Replace "This pesticide is toxic to fish and wildlife." with "This pesticide is extremely toxic to birds, mammals, fish, and aquatic invertebrates."

NC 860005 (asparagus)- In the RESTRICTED USE block, revise the reason for classification to read "Due to acute oral, dermal, inhalation, eye, and skin toxicity." In the REMARKS, revise the maximum number of applications per year from 3 to 2. Revise the PHI statement to read "Allow at least 6 months between the last application and harvest." Add a RESTRICTIONS block under the table (as on your other 24C labels) with the following information: "• Do not enter or allow workers to enter into treated areas during the restricted entry interval (REI) of 11 days. • Do not apply to asparagus grown for seed. • For aerial application, human flaggers are prohibited. Use mechanical flaggers or global positioning system (GPS) equipment."

OR 040030 (asparagus)- Relocate the RESTRICTED USE block to above the "FOR DISTRIBUTION AND USE ..." line. Include "Due to acute oral, dermal, inhalation, eye, and skin toxicity." as the reason for the classification. Under the ingredients statement, add "Contains petroleum distillates." In the first Restriction, replace "per acre per season" with "per year". Revise the REI to read "11 days". Revise the PHI statement to read "Allow at least 6 months between the last application and harvest." After the sentence beginning "Do not apply within a minimum of 25 feet...", add "A level, well-maintained 25 foot vegetative buffer strip between areas to which this product is applied and permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance. Runoff of this product will be reduced by avoiding application when rainfall is forecasted to occur within 48 hours." Revise the last bullet item in the RESTRICTIONS to read "For aerial application, human flaggers are prohibited. Use mechanical flaggers or global positioning system (GPS) equipment." In the first sentence of ENVIRONMENTAL HAZARDS section, replace "This pesticide is toxic to fish and wildlife." with "This pesticide is extremely toxic to birds, mammals, fish, and aquatic invertebrates." In the next sentence, delete "For terrestrial uses,". In the current third (which will become the fourth) paragraph delete "This product is toxic to fish and wildlife." The correct sentence appears as the first sentence of the first paragraph. Repeat the buffer strip paragraph above, ("A level...;etc.") as the third paragraph of the Environmental Hazards.

OR 050024 (Easter Lilies)- Relocate the RESTRICTED USE block above the "FOR DISTRIBUTION AND USE ..." line. In the RESTRICTED USE block, revise the reason for classification to read "Due to acute oral, dermal, inhalation, eye, and skin toxicity.". Under the ingredients statement, add "Contains petroleum distillates.". The Environmental Hazards text should be expanded to the full version required by the IRED, i.e., it should appear as the corrected version for OR 040030 (above). In the 72 hour REI sentence, delete the word "outdoor". In the table, revise the limitation to read "Maximum number of applications: 1 per year". Under the table add: "Do not apply within a minimum of 25 feet of lakes, reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries and commercial fish farm ponds. A level, well-maintained 25 foot vegetative buffer strip between areas to which this product is applied and permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance."

WA 920026 (radishes grown for seed) - In the RESTRICTED USE block, the reason for classification should read "Due to acute oral, dermal, inhalation, eye, and skin toxicity.". Delete the first paragraph of the ENVIRONMENTAL HAZARDS. This precaution is on the Federal registered label. In the RESTRICTIONS, revise the first bullet to read "Do not apply more than once per year.". Add as the fourth bullet: "Restricted entry interval (REI) is 48 hours, but is increased to 72 hours for areas where average rainfall is less than 25 inches per year.". After the bullet beginning "No portion of the radish seed plant..." add another bullet as follows: "Do not feed or graze radish forage or fodder. Do not cut radish tops for hay or forage."

WA 040015 (asparagus)- In the RESTRICTIONS, revise the REI to read "11 days" rather than "7 days". Revise the PHI statement to read "Allow at least 6 months between the last application and harvest.". Relocate "Do not apply to asparagus that is grown for seed." to appear as the sixth bullet in the RESTRICTIONS. You may delete the Environmental Hazards paragraph since it already appears and is referenced on the Federal registered label.

Please forward a copy of the corrected revised SLN labeling to the appropriate State official(s) for their comment/approval. Any additional State-stipulated wording or limitations, including reference to applicable State Rules or Regulations or updates to them, must appear on the labeling. Please notify the Agency by e-mail to pilitt.dana@epa.gov when you actually do forward the revised SLN label(s) to the State(s). When submitting each label to the State, please request the State to forward a copy of the revised SLN label (including their additions, if any) to the Agency for official confirmation of their receipt and approval, since Agency approval of the State's notification is required to finalize the action.

If you have any questions or comments regarding this letter, please contact George LaRocca at (703) 305-6100 or via e-mail at [larocca.george@epa.gov](mailto:lارocca.george@epa.gov).

Enclosure

RESTRICTED USE PESTICIDE

Due to acute toxicity

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.

Di-Syston[®] 8 Emulsifiable Systemic Insecticide

8 pound per Gallon Formulation

Low Odor Formula

Formulated for Effective Soil Treatment

ACTIVE INGREDIENT:

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

INERT INGREDIENTS:..... 15%

100%

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

EPA Reg. No. 264-734

EPA Est. No.



STOP – Read the label before use.
KEEP OUT OF REACH OF CHILDREN
DANGER POISON
PELIGRO



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577

For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

Contains an organophosphate that inhibits cholinesterase.

If swallowed	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. • Call a poison control center or doctor for treatment advice.
If inhaled	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor.

ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAY 2 2 2007

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 264-734

Note To Physician: ANTIDOTE - Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered, but only in conjunction with atropine.

Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

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

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Poisonous if swallowed, inhaled, or absorbed through the skin. Rapidly absorbed through the skin. Wear protective clothing and gloves. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Do not get in eyes, on skin, or on clothing. Remove contaminated clothing and wash before reuse. Do not breathe fumes or spray mist.

Handler PPE Requirements:

Personal Protective Equipments:

Some materials that are chemical-resistant to this product are (Barrier Laminate or Butyl Rubber). If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Handlers using engineering controls must wear:

- long-sleeved shirt and long pants
- shoes plus socks

In addition to the above, mixers and loaders must wear:

- Chemical-resistant gloves
- Chemical-resistant apron

See Engineering Controls for additional requirements.

Handlers engaged in those activities for which use of an engineering control is not possible must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant apron (if exposed to the concentrate)
- Chemical-resistant headgear (if overhead exposure)
- Protective eyewear
- A NIOSH-approved dust mist filtering respirator with any R, P or HE filter.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

ENGINEERING CONTROLS:

Mixers and loaders must use a closed loading system providing dermal and inhalation protection and all loaders must use and maintain this system in a manner consistent with the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4)]. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2 ml per disconnect. In addition, mixers and loaders must:

- wear long-sleeved shirt and long pants, chemical-resistant gloves and apron, shoes, and socks;
- wear protective eyewear if the system operates under pressure; and
- be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown the following PPE:
 - Coveralls, chemical-resistant footwear plus socks, chemical-resistant headgear (if overhead exposure), and a NIOSH-approved dust-mist filtering respirator with any R, P or HE filter.

Applicators using motorized ground-equipment (except for motorcycles) must use and maintain an enclosed cab for dermal protection in a manner that is consistent with the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(5)]. In addition, applicators using an enclosed cab must:

- wear long-sleeved shirt and long pants, shoes, and socks;
- wear a NIOSH-approved dust mist filtering respirator with any R, P or HE filter; or use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as the respirator specified above; and;
- be provided and have immediately available for use in case of an emergency when they must exit the cab, the following PPE:
 - Coveralls over long-sleeved shirt and long pants
 - Chemical-resistant gloves
 - Chemical-resistant footwear plus socks
 - Chemical-resistant headgear (if overhead exposure) and,
 - a NIOSH approved dust-mist filtering respirator with any R, P or HE filter.

Applicators re-entering the enclosed cab after spending time in the treated area must:

- take off any PPE that was worn in the treated area before reentering the cab, and
- store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

User Safety Recommendation

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to birds, mammals, fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several months. Poorly draining soils and soils with shallow watertables are more prone to product runoff that contains this product.

A level, well maintained 25 foot vegetative buffer strip between areas to which this product is applied to permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Disulfoton is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This pesticide is toxic to bees exposed to direct treatment. Do not apply this product while bees are actively visiting the treatment area.

RESTRICTIONS

Not for home garden use. Do not use on other crops used for food or forage. Use only according to label directions. Application at rates above those shown may result in illegal crop residues. Do not use in greenhouses. Do not apply in any manner not specified on the label.

DIRECTIONS FOR USE

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

General Application Restrictions:

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Application by hand held equipment is prohibited for all sites.

A level, well maintained 25 foot vegetative buffer strip between areas to which this product is applied to permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Restricted-Entry Intervals:

Do not enter or allow workers to enter into treated areas during the restricted entry interval (REI). The REI for all crops is 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches a year.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated areas without restriction if there will be no contact with anything that has been treated.

Early Re-entry Personal Protective Equipment:

The following PPE is required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water:

- Coveralls worn over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear (if overhead exposure)
- Protective eyewear

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking invert to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577, or contact Chemtrec at 800-424-9300.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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

The formulation of DI-SYSTON 8 is highly versatile and offers many forms of application. It can be sprayed or injected into the furrow at planting time or soil injected as a side-dress treatment at planting time or after plants become established. Applications may be made in water emulsion, with liquid fertilizer, or undiluted in specially designed equipment for low volume soil injection but never on crops for which less than 1 quart DI-SYSTON 8 per acre is the recommended dosage. Time and method of application and limits for use are discussed in detail for each specific crop under "Remarks" below.

Do not contaminate feed or food.

RECOMMENDED APPLICATIONS

IMPORTANT: When used on cotton, or lettuce at the maximum recommended rates under adverse conditions such as extremely cool or wet or extremely dry weather, DI-SYSTON may cause some delay in emergence, stunting of seedlings, or reduction of stand. Such damage may be more pronounced in light sandy soils.

MIXING WITH LIQUID FERTILIZER OR OTHER PESTICIDES: DI-SYSTON 8 is physically compatible with many registered pesticides and liquid fertilizers. When considering mixing DI-SYSTON 8 with other pesticides or with liquid fertilizer, first contact your dealer. For further information, contact your Bayer CropScience representative. If your dealer and Bayer CropScience representative have no experience with the combination you are considering, you should conduct tests to determine physical compatibility. A compatibility test should be conducted with each batch of liquid fertilizer because of the variability of these fertilizers. When mixing with certain high phosphorous liquid fertilizers, the use of COMPLEX compatibility agent (or other equivalent agents) at 1 quart per 100 gallons of mixture may be needed to assure proper mixing.

WHEN CONDUCTING COMPATIBILITY TESTS, WEAR ALL PROTECTIVE GEAR AND OBSERVE ALL PRECAUTIONS LISTED IN THE PRECAUTIONARY STATEMENTS SECTION OF THIS LABEL.

To determine physical compatibility, pour the recommended proportions of each chemical with the proportion of water which will be present in the spray tank or chemical supply tank into a suitable container. Mix thoroughly and allow to stand for five minutes. If the combination remains mixed, or can be remixed readily, the mixture is considered physically compatible. When mixing with wettable powder or dry flowable formulations, add and disperse these first, then add liquid pesticides. If application will be through an irrigation system, conduct another compatibility test at the concentrations which will be present in the irrigation lines. If there is any separation which cannot be remixed readily, Bayer CropScience recommends that the combination not be used. Combinations should be kept agitated and should be applied immediately. Do not allow combinations to sit for prolonged periods in a spray or chemical supply tank or irrigation line.

USE IN CHEMIGATION SYSTEMS

DI-SYSTON 8 may be applied through irrigation systems only on those crops listed under Recommended Applications where application through irrigation systems is recommended.

Types of Irrigation Systems: Apply DI-SYSTON 8 only through sprinkler, including center pivot, lateral move, side roll, or overhead solid set irrigation systems; or low pressure drip (trickle) irrigation systems. Do not apply DI-SYSTON 8 through any other type of irrigation system.

GENERAL DIRECTIONS FOR ALL RECOMMENDED TYPES OF IRRIGATION SYSTEMS

Uniform Water Distribution and System Calibration: The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring: A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Apply only when wind speed is 10 mph or less.

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

For ground rig applications, apply product no more than 4 feet above the ground or the crop canopy, and only when wind speed is 10 mph or less at the application site as measured by an anemometer.

Required System Safety Devices: The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

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

Using Water from Public Water Systems: DO NOT APPLY DI-SYSTON 8 THROUGH ANY IRRIGATION SYSTEM CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

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

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

All words shall consist of letters at least 2 1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

Posting required for chemigation does not replace other posting and reentry interval requirements for farm worker safety.

Agitation: For application of DI-SYSTON 8 alone, a chemical supply tank is not necessary for premixing since DI-SYSTON 8 mixes well with water in the irrigation line. If a chemical supply tank is used, constant strong mechanical or hydraulic agitation must be maintained in the chemical supply tank during the entire period of application.

Chemical Supply Tank Dilution: If a chemical supply tank is used, you must determine the required amounts of DI-SYSTON 8 and water to mix in the tank.

The amount of DI-SYSTON 8 needed equals the number of pints of DI-SYSTON 8 to be applied per acre multiplied by the number of acres to be chemigated.

The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump multiplied by the number of hours chemigation will take place.

The amount of water needed equals the amount of emulsion needed minus the amount of DI-SYSTON 8 needed.

For example, for center-pivot or automatic-move linear systems, if you want to apply 3 pints of DI-SYSTON 8 per acre to 130 acres in 20 hours and your injection pump delivers 15 gallons per hour, you need: 3 pints of DI-SYSTON 8 per acre X 130 acres = 390 pints or 48.75 gallons of DI-SYSTON 8. And, you need: 15 gallons per hour X 20 hours = 300 gallons of emulsion, minus 48.75 gallons of DI-SYSTON 8 = 251.25 gallons of water.

Another example, for solid set and manually controlled linear systems, is if you want to apply 3 pints of DI-SYSTON 8 per acre during the last 60 minutes of a set irrigating 6 acres and your injection pump delivers 20 gallons per hour, you need 3 pints of DI-SYSTON 8 per acre X 6 acres = 18 pints or 2.25 gallons of DI-SYSTON 8 for the 6 acre set. And, you need 20 gallons per hour X 1 hour = 20 gallons of emulsion, minus 2.25 gallons of DI-SYSTON 8 = 17.25 gallons of water for the 6 acre set.

Cleaning the Chemical Injection System: In order to accurately apply pesticides, the chemical injection system must be kept clean; free of chemical or fertilizer residues and sediments. Refer to your owners manual or ask your equipment supplier for the cleaning procedure for your injection system.

Flushing the Irrigation System: At the end of the application period, allow time for all lines to flush the pesticide through all nozzles or emitters before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

Equipment Area Contamination Prevention

It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas.

Center-Pivot and Automatic-Move Linear Systems: Inject the specified dosage per acre continuously for one complete revolution or move of the system. DO NOT USE END GUNS. The system should be run at maximum speed.

Solid Set and Manually Controlled Linear Systems: Injection should be during the last 30 to 60 minutes of regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation. DO NOT USE END GUNS.

RECOMMENDED APPLICATIONS									
CROP	USE	DOSAGE	REMARKS						
Cotton	Herbicide Safener	0.75 fl oz to 1.2 fl oz 1000 ft. row	<p>Aerial applications are prohibited. Apply at plant, in furrow only. For use only as an herbicide safener.</p> <p>PREPLANT: As a preplant soil incorporated treatment, DI-SYSTON 8 may be applied in approximately a 6-inch band as a water emulsion.</p> <p>- OR -</p> <p>PLANTING/REPLANTING: Apply as a water emulsion or with liquid fertilizer. Spray/apply in the furrow or soil inject on each side of the furrow. This application may be combined with a fungicide application which is registered and recommended for disease on this crop.</p> <p>RATE CHART FOR PREPLANT OR PLANTING TIME APPLICATION</p> <table border="1"> <thead> <tr> <th>Heavy Soil</th> <th>Medium Soil</th> <th>Light Soil</th> </tr> </thead> <tbody> <tr> <td>1.2 fl oz/1000 ft of row or 1 pt/acre</td> <td>1 fl oz/1000 ft of row or 12 fl oz/acre</td> <td>0.75 fl oz/1000 ft of row or 9 fl oz/acre</td> </tr> </tbody> </table> <p>At planting, application of DI-SYSTON may be used in conjunction with a pre-emergent surface applied or preplant incorporated treatment of Command Herbicide. Refer to the herbicide product label for appropriate preplant or preemergent herbicide application directions and use rates. Do not reduce the application rate of DI-SYSTON insecticide when Command herbicide is applied as a banded treatment.</p> <p>Do not graze treated fields after any application of DI-SYSTON 8. Do not feed treated forage to livestock.</p>	Heavy Soil	Medium Soil	Light Soil	1.2 fl oz/1000 ft of row or 1 pt/acre	1 fl oz/1000 ft of row or 12 fl oz/acre	0.75 fl oz/1000 ft of row or 9 fl oz/acre
	Heavy Soil	Medium Soil	Light Soil						
1.2 fl oz/1000 ft of row or 1 pt/acre	1 fl oz/1000 ft of row or 12 fl oz/acre	0.75 fl oz/1000 ft of row or 9 fl oz/acre							
West of the Rocky Mountains, some mite populations have developed resistance to organophosphate insecticides, including Di-Syston. Consult your local cooperative extension service, agricultural advisor or Bayer CropScience representative for details.									

VEGETABLES

CROP	INSECT	DOSAGE	REMARKS
Beans (succulent, including snap or green lima)	Aphid Leafhopper Mexican bean beetle (larvae) Mites Thrips	0.9 fl oz per 1000 feet -OR- 1 pt per acre	<p>Read "IMPORTANT" statement under "Recommended Applications" for additional information before use on this crop.</p> <p>For snap or green Lima beans, apply in a water emulsion or with liquid fertilizer as a soil injection on each side of the seed furrow at planting time only. Do not apply more than once per season. Do not apply within 60 days of harvest. Do not feed treated vines or hay. Not for use on dry beans, peas, or lentils.</p>
Brussels sprouts (For use in California only)	Aphids Flea beetles Leafhopper Mites Thrips	1.1 fl oz per 1000 feet of row (36" row spacing) up to maximum of 1 pt per acre	<p>CHEMIGATION: Row treatment applications as listed below may be applied through low-pressure (drip or trickle) irrigation systems. Follow all directions under Chemigation section of this label.</p> <p>Do not apply to vegetables grown for seed.</p> <p>TRANSPLANT SEED BEDS: Apply evenly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 1 pint per acre. Work into the top 2 to 3 inches of soil and plant seed in normal manner.</p> <p>FIELD APPLICATION: Apply specified dosage in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow or transplanted row at planting and where necessary, injected as a side-dressing after plants are established. Do not apply more than one field application per season nor within 30 days of harvest for brussels sprouts, or 40 days of harvest for cauliflower.</p>
Cauliflower (For use in California only)	Aphids Flea beetles Leafhopper		

* On row crops where row spacing is extremely narrow, do not place treated zones (band or furrow) closer together than 6 inches.

RECOMMENDED APPLICATIONS			
CROP	INSECT	DOSAGE	REMARKS
Broccoli (For use in California only)	Aphids Flea beetles Leafhopper	1.1 fl oz per 1000 ft of row (36" row spacing)	TRANSPLANT SEED BEDS: Apply evenly over bed area in a water emulsion as a broadcast spray prior to seeding at the rate of 1 pint per acre. Work into the top 2 to 3 inches of soil and plant seed in normal manner. FIELD APPLICATIONS: Apply specified dosage in a water emulsion or with liquid fertilizer as an injection on each side of the seed furrow or transplanted row at planting or injected as a side-dressing after plants are established. Do not apply directly on the seed. Do not apply more than one field application per season. Do not use within 14 days of harvest for broccoli or 42 days of harvest for cabbage. Do not apply to cabbage by chemigation.
	Cabbage (Including tight-heading varieties of Chinese cabbage)	Aphids Flea beetles Root aphids	
Lettuce (For use in California only)	Aphids Leafhoppers Mites Root aphids Thrips	0.6 to 1.2 fl oz per 1000 ft of row (20" row spacing) up to maximum of 1 to 2 pt per acre	Read "IMPORTANT" statement under "RECOMMENDATIONS APPLICATIONS" for additional information before use on this crop. CHEMIGATION: Row treatment applications as listed below may be applied through low-pressure (drip or trickle) irrigation systems. Follow all directions given under Chemigation section of this label. SEEDED LETTUCE: Do not apply to transplanted lettuce. Apply at seeding or after seeding, in water or liquid fertilizer as a side-dress injection on each side of the row. Do not apply directly on the seed. Do not make more than one application per crop season. Do not apply within 60 days of harvest. Use the higher rate on heavy organic soils.

RECOMMENDED APPLICATIONS			
CROP	INSECT	DOSAGE	REMARKS
Easter Lilies	Aphids Lace bug Leafhoppers Mites Thrips Whiteflies	0.53 to 1.1 fl oz per 100 ft of row	Apply in the furrow over the bulbs after they are set, but before covering with soil. The higher dosage is recommended for heavy organic or muck soils. Maximum number of applications: 1

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

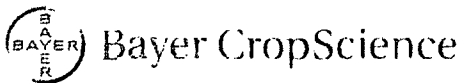
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Di-Syston 8 Emulsifiable Systemic Insecticide (PENDING) Submitted 09/15/04, Resubmitted 10/29/04, Resubmitted 04/11/05.