

400-278

3/26/2004

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 26 2004

Willard W. Cummings
U.S. Registration, Crop Protection
Uniroyal Chemical
74 Amity Road
Bethany, CT 06524-3402

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: EPA Reg. No. 400-278
DE-FEND® E-267
Label Amendment: Deletion of Public Health
and Residential Ornamental Uses
Your Letter dated May 15, 2001

Dear Mr. Cummings:

The submitted draft label referred to above is acceptable provided that you make the following changes:

1. Add the following paragraph before the Ornamental Plants (page 3) under "USE DIRECTIONS"

ORNAMENTAL PLANTS GROWN IN NURSERIES ONLY

Do not use on ornamental plants grown in greenhouses, shade houses, Christmas tree and conifer plantations, landscapes, interiorscapes and residential, public, recreational, commercial, industrial and institutional establishments." You may list the use directions for ornamental plants separately, but all of them must be growing in a commercial nursery.

A stamped copy of the draft label is enclosed for your records. Submit two (2) copies of your final printed labeling before you release the product for shipment.

The confidential statement of formulas (CSFs) for the basic and alternate formulations in the jacket are outdated because the purity of starting material has changed. Submit revised CSFs to update the information in the jacket. Should you have any questions, do not hesitate to contact the reviewer of this product, Mr. Suku Oonnithan 703-605-0368.

Sincerely,

A handwritten signature in black ink that reads "S. Oonnithan".

Daniel C. Kenny
Product Manager (01)
Insecticide Rodenticide Branch
Registration Division (7505C)

Encl.

DE-FEND[®] E-267

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ACCEPTED
with COMMENTS
In EPA Letter Dated:
MAR 26 2004

DIMETHOATE SYSTEMIC INSECTICIDE

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
400-278

Net contents:

Active Ingredient:	
Dimethoate (O,O-Dimethyl S-(N-methylcarbamoylmethyl) phosphorodithioate)*	30.5%
Inert Ingredients:**	69.5%
Total	100.0%

*Contains 2.67 lbs. per gallon.

**Contains xylene-range aromatic solvent

KEEP OUT OF REACH OF CHILDREN WARNING • AVISO

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.)

FIRST AID

DE-FEND E-267 is an organophosphate insecticide

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.
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 lens, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none">• Immediately call a poison control center or doctor.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give any liquid to the person.• Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: For all exposures, administer atropine and 2-PAM as an antidote for acetylcholinesterase inhibition. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed or absorbed through skin. Harmful if inhaled. Causes eye and skin irritation. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray mist. Use only with adequate ventilation.

**UNIROYAL
CHEMICAL**

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category F on an EPA chemical resistance category selection chart.

WPS USES: PPE requirements for applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) (in general, agricultural-plant uses are covered) are: Coveralls over short-sleeved shirt and short pants; chemical-resistant gloves, such as Nitrile rubber or Butyl rubber or Viton or Barrier laminate; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment, mixing or loading. For exposures in enclosed areas: A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G). For exposures outdoors: Dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Aerial Application: Automatic Flagging Devices Should Be Used Whenever Feasible. If Human Flaggers Are Employed They Must Wear The Protective Clothing and Respirator Specified on This Label.

NON-WPS USES: Applicators and other handlers who handle this pesticide for any uses NOT covered by the Worker Protection Standard (40 CFR Part 170) - in general, only agricultural-plant uses are covered by the WPS - must wear: rubber gloves or plastic covered reinforced gloves; boots or boot covers; long-sleeved shirt & long pants; and wide brimmed hat.

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

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing 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 toxic to wildlife and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning equipment or disposal of wastes. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Protective information may be obtained from your Cooperative Agricultural Extension Service.

PHYSICAL OR CHEMICAL HAZARDS

DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME. DO NOT STORE BELOW FREEZING TEMPERATURES.

DIRECTIONS FOR USE

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

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.

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.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE 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, is:

- coveralls over short-sleeved shirt and short pants
- chemical resistant gloves such as nitrile rubber or butyl rubber or neoprene or viton or barrier laminate
- chemical-resistant footwear plus socks
- protective eyewear
- chemical-resistant headgear for overhead exposure

BEFORE USE READ DIRECTIONS, CAUTION AND NOTICE STATEMENTS CAREFULLY

DE-FEND E-267 may be used for control of certain insects on crops including leafminers, lygus bugs, aphids, thrips, leafhoppers, grasshoppers and mites. Forage, fruit, vegetables and staple crops on which DE-FEND E-267 may be used include apples, beans, cole crops (broccoli, cabbage, cauliflower), cotton, lettuce, pears, peas, peppers, potatoes, spinach, tomatoes. See table for insects, crops and conditions under which DE-FEND E-267 may be used. DE-FEND E-267 kills insects by systemic, contact and residual action. Excellent control is obtained of insects on the underside of leaves and stems or rolled into leaves as well as those which are more exposed to the spray.

FOR GENERAL APPLICATION by commercial growers or commercial applicators, on the crops listed, apply recommended amounts in sufficient water for good coverage.

CHEMIGATION: Refer to supplemental labeling entitled "APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION" for use directions for chemigation. Do not apply this product through any irrigation systems unless the supplemental labeling on chemigation is followed.

FOR AERIAL APPLICATION use the recommended amount of DE-FEND E-267 in 2 to 10 gallons of water. Avoid drift to adjacent crops. Repeat application as necessary unless otherwise specified. Consult agricultural extension or agricultural experiment station specialists regarding recommendations of time of application. Apply when air is calm and the temperature is below 60°F. Do not apply during bloom period or on citrus seedlings. Make no more than 2 applications to mature fruit.

RINSE AND DRAIN PROCEDURE FOR PESTICIDE CONTAINER

- 1 Empty container into spray tank. Then drain in vertical position for 30 seconds.
- 2 Add measured amount of rinse water (or other diluent) so container is 1/4 to 1/2 diluent. For example, one quart in a one-gallon container.
- 3 Rinse container thoroughly, pour into tank, and drain 30 seconds. Repeat three times. Add enough fluid to bring tank up to level.
- 4 Follow CONTAINER DISPOSAL Directions.

USE DIRECTIONS ORNAMENTAL INSECTS

DE-FEND E-267 is generally effective in controlling aphids, thrips, leaf miners, scales, leafhoppers, and mites. For proper timing of treatments for the control of specific pests on ornamental plants, consult local agricultural authorities. Make adequate sprays when pests appear or when damage is first observed. Do not over-dose or over-spray. Do not use on ornamental plants not listed. The uses listed are foliar sprays unless otherwise noted.

Ornamental Plants	Pest Controlled	Amount Per 6 Gal. Water
Azaleas (Outdoor plants)	Lace Bugs Leaf Miners Mites Tea Scale White Flies	1.5 oz.

Ornamental Plants	Pest Controlled	Amount per 6 Gal. Water
Camellias	Aphids Carnettia Scale Mites Tea Scale	1.5 oz. Foliar Spray: Apply 2 sprays 6 weeks apart the first year followed by annual applications soon after first growth begins in the spring Soil Drench: Apply as a soil drench around the base of plants in early spring at the rate of 4 tablespoons per gallon of water per plant up to 6 feet tall. Increase the rate proportionately for larger plants.
Carnations	Aphids Thrips Mites	1.5 oz. Soil Drench: Apply as a soil drench at the rate of 4 fluid ounces per 500 square feet of bed or bench (5 qts. per 1/2 acre) in sufficient water for even distribution. Water in thoroughly after application.
Cyperus	Bactra Moth Larvae	1.5 oz. Apply as a drenching spray.
Day Lilies	Aphids Thrips	3 oz.
Roses (Outdoor Plants)	Aphids Leafhoppers Mites Thrips	1.5 oz.
Arboretum	Aphids Bagworms Mites	3 oz.
Birch	Aphids Leaf Miners	3/4 oz. For leaf miners apply when leaves are expanded (about Mid May) and repeat in early July.
Boxwood	Leaf Miners Mealy Bugs Mites	1.5 oz. For leaf miners apply in spring when leaf miner flies first appear or in early summer for control of larvae in the infested leaves.
Cedar	Mites	3 oz.
Euonymus	Aphids Scale	3 oz.
Gardenias	Tea Scale White Flies	1 1/2 oz.
Gerberas	Thrips	1 1/2 oz.
Gladiolus	Aphids Thrips	1 1/2 oz.
Iris	Aphids Iris Borer Thrips	3 oz. For borer control spray when new leaves are 5 - 6 inches tall.
Poinsettias (Outdoor plants)	Mites White Flies Mealy Bugs Aphids	1 1/2 oz.
Ficus nitida (Outdoor plants)	Thrips	1 1/2 oz. Note: Do not use on potted plants.
Holly (English and American, not Burford variety)	Leaf Miners Mites Soft Scale	1 1/2 oz. For leaf miners apply in spring when leaf miner flies first appear or in early summer for the control of larvae in infested leaves.
Hemlock	Mites Scale	1 1/2 oz.
Juniper	Aphids Bagworms Midges Mites	3 oz.
Oak	Golden Oak Scale	3 oz.
Pine	Aphids Bagworms European Pine Shoot Moth Nantucket Pine Tip Moth Zimmerman Pine Moth	3 oz.
Roses	Aphids Leafhoppers Mites Thrips	Amount per acre: 1 pt. in 5 - 16 gal. water by air 1 pt. in 100 gal. water ground application
Taxus	Fletcher Scale Mealy Bugs Mites	3 oz.

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AGRICULTURAL INSECTS

DE-FENDO E-267 may be used for control of certain insects on crops including leafminers, lygus bugs, aphids, thrips, leafhoppers, grasshoppers and mites. Forage, fruit, vegetables and staple crops on which DE-FENDO E-267 may be used include apples, beans, cole crops (broccoli, cabbage, cauliflower), cotton, lettuce, pears, peas, peppers, potatoes, spinach, tomatoes. See table for insects, crops and conditions under which DE-FENDO E-267 may be used. DE-FENDO E-267 kills insects by systemic, contact and residual action. Excellent control is obtained of insects on the underside of leaves and stems or rolled into leaves as well as those which are more exposed to the spray.

FOR GENERAL APPLICATION by commercial growers or commercial applicators, on the crops listed, apply recommended amounts in sufficient water for good coverage.

CHEMIGATION: Refer to "APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION" for use directions for chemigation. Do not apply this product through any irrigation systems unless the directions for chemigation are followed.

FOR AERIAL APPLICATION use the recommended amount of DE-FENDO E-267 in 2 to 10 gallons of water. Avoid drift to adjacent crops. Repeat application as necessary unless otherwise specified. Consult agricultural extension or agricultural experiment station specialists regarding recommendations of time of application. Apply when air is calm and the temperature is below 60°F. Do not apply during bloom period or on citrus seedlings. Make no more than 2 applications to mature fruit.

CROP	PESTS CONTROLLED	RATE	LIMITATIONS
Peppers	Aphids, Leaf miners, Maggots	1/2 - 1 pint/Acre	Peppers may be harvested on day of application.
Peas	Aphids	1 pint/Acre	Apply with ground equipment only. Do not graze livestock in treated groves. Allow 21 days between last application and harvest.
Alfalfa	Aphids, Leafhoppers, Lygus bugs, Grasshoppers, Reduction of Alfalfa Weevil larvae	1/2 - 1 1/2 pints/Acre	Do not feed livestock on treated crops, threshings or hay treated less than 10 days before harvest or pasture stubble sooner than 10 days after treatment. Effective only on cutting to which applied. Make only one application per year. This pesticide is highly toxic to bees, do not apply if bees are visiting.
Cotton (grown in AZ & CA)	Lygus bugs, Leafhoppers, Thrips, Black leafhoppers	1/2 - 1 1/2 pints/Acre	Do not apply less than 14 days before harvest. Do not repeat application within 14 days. Do not feed treated forage or graze livestock on treated fields. Make only two applications per season as needed.
Safflower (grown in CA)	Aphids, Leafhoppers, Lygus bugs, Thrips	1/2 - 1 1/2 pints/Acre	Do not apply less than 14 days before harvest. Repeat applications should not be made at intervals closer than 14 days. Do not make more than two applications at the higher rate.
Tomatoes, Watermelons, Melons	Aphids, Leafminers, Leafhoppers	1/2 - 1 1/2 pints/Acre	Do not apply less than 7 days before harvest.
Mustard greens, Swiss chard, Fodder (escarole)	Aphids, Leafhoppers, Leafminers	1/2 pint/Acre	Do not apply less than 24 days before harvest.
Wheat (grown in Texas, Oklahoma, Kansas, South Dakota)	Aphids Brown wheat mite	1/2 - 1 1/2 pints/Acre 1/2 - 1/2 pint/Acre	Do not apply within 14 days of grazing immature plant. Do not harvest grain within 60 days of last application. Do not make more than 2 applications per growing season.
Sorghum	Greenbug	1/2 - 1 1/2 pints/Acre	(1/2 to 1 1/2 pints/Acre for light infestations on young sorghum prior to head formation) Do not apply after heading. Do not feed or graze within 28 days of last application. Make only three ground applications per season as needed.
Field Corn	Banks Grass Mite (except Trans-pecos area of Texas)	1 - 1 1/2 pints/Acre	Broadcast by air. Spray over the foliage when mites appear. Apply in ratio of 1 part DE-FENDO E-267 in 20 quarts of water. Do not use less than 2 1/2 gallons per acre for 1 pint rate and 3 1/2 gallons per acre for 1 1/2 pint rate. Days between last application and harvest 14 (forage) 42 (grain). Apply as necessary. Make no more than 3 applications per year. Foliar Application. Do not apply to corn during the pollen-shed period.
Cotton (Early Season)	Thrips, Mites, Aphids	1/2 - 1/2	Do not apply less than 14 days before harvest. Do not repeat application within 14 days. Do not feed treated forage or graze livestock on treated fields.

CROP	PESTS CONTROLLED	RATE	LIMITATIONS
Potatoes	Aphids, Leaf miners, Leafhoppers	1/2 - 1 1/2 pints/Acre	Potatoes may be harvested on day of application.
Beans (green, lima, snap, dry)	Aphids, Leaf miners, Leafhoppers, Mites, Lygus bugs	1/2 - 1 1/2 pints/Acre	Beans may be harvested on day of application. Do not feed treated vines. This pesticide is highly toxic to bees, do not apply if bees are visiting.
Broccoli, Cauliflower, Cabbage	Aphids	1/2 - 1 1/2 pints/Acre	Do not apply less than 7 days before harvest.
Head lettuce	Aphids, Leafhoppers, Leaf miners	1/2 pints/Acre	Do not apply less than 7 days before harvest.
Leaf lettuce, Spinach, Collards, Kale, Turnip (greens and roots)	Aphids, Leafhoppers, Leaf miners	1/2 pints/Acre	Do not apply less than 24 days before harvest.
Peas	Aphids	1/2 pints/Acre	Peas may be harvested on day of application. Do not feed or graze hay within 21 days after last application when a stationary viner is used. Do not feed or graze when a mobile viner is used. Do not make more than one application per growing season. This pesticide is highly toxic to bees, do not apply if bees are visiting.
Apples, Pears (bearing & non bearing)	Aphids, Leafhoppers, Pear Psylla, Mites (except rust mites)	1/2 - 1 1/2 pints/100 gals. water	Foliar application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not apply less than 28 days before harvest. Do not graze livestock on cover crops in treated orchards. Foliar Application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.
Citrus (non bearing) (AZ & CA)	Thrips, Aphids	SOIL DRENCH: For trees 1 - 3 years old apply 3 quarts per acre in the furrow or soil ring around the base of the tree. Apply as soon as insect injury to new growth begins. Use only on non-bearing trees. Nursery stock application should not be made in the year trees begin to bear fruit. Do not graze livestock on cover crops in treated orchards. Foliar Application: Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.	
Lemons, Oranges	Aphids, Thrips	Ground Equipment: 1/2 - 1 1/2 pints/100 gals. water. Apply as an outside coverage spray. Aerial Equipment: 3 to 5 pints/Acre in 15 to 20 gals. water. Do not graze livestock on cover crops in treated orchards. Foliar Application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Make no more than 2 applications to mature fruit.	15
Grapefruit	Mites	Ground Equipment: 1/2 - 1 1/2 pints/100 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock on cover crops in treated orchards. Foliar Application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Make no more than 2 applications to mature fruit.	15
Tangerines	Scales (except black or snow)	Ground Equipment: 1 1/2 - 2 pints/100 gals. water. Apply as a thorough coverage spray. Do not graze livestock on cover crops in treated orchards. Foliar Application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Make no more than 2 applications to mature fruit.	45
	White flies	Ground Equipment: 1 1/2 pints/100 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock on cover crops in treated orchards. Foliar Application. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Make no more than 2 applications to mature fruit.	15

Days between last application and harvest.

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APPLICATION THROUGH IRRIGATION SYSTEMS - CHEMIGATION
Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow, border; or drip (trickle) irrigation system(s). Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation systems (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

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.

Mix in clean supply tank the recommended amount of this product for acreage to be covered, and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants or fertilizers unless prior use has shown the combination noninjurious under your conditions of use. Follow precautionary statements and directions for all tank-mix products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated.

Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

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.

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

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 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 systems 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, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as positive displacement

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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.

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

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

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 systems 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 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.

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

FLOOD (BASIN), FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from the backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

a. 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.

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

c. 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 systems is either automatically or manually shut down.

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

e. 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.

f. Systems must use a metering pump, such as 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.

DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

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 systems 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 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.

STORAGE AND DISPOSAL

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

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: 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.

IMPORTANT NOTICE—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

® DEFEND is a Registered Trademark of Uniroyal Chemical Company, Inc.

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