

7969-225

9/17/2004

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg.  
Number:

7969-225

Date of Issuance:

SEP 17 2004

## NOTICE OF PESTICIDE:

  x   Registration  
      Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Desperado

Name and Address of Registrant (include ZIP Code):

BASF Corporation  
P.O. Box 13528  
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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(C) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label change:

Revise the EPA Registration Number to read,  
"EPA Reg. No. 7969-225".

Submit one copy of the final printed label before you release the product for shipment.

Signature of Approving Official:

*Carl S. Waller for*  
Mary L. Waller, Product Manager (21)

Date:

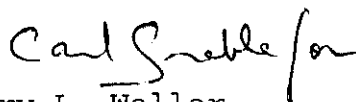
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If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Sincerely yours,



Mary L. Waller  
Product Manager (21)  
Fungicide Branch  
Registration Division (7505C)

Enclosure

7505C:CGrable:cg:9/17/04

BASF

# Desperado®

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:

SEP 17 2004

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
7969-715

Aqueous Suspension  
Miticide/Insecticide/Fungicide (MIF)

For Use on Nectarines, Peaches, Plums, Prunes,  
Almonds and other Tree Nuts and Stone Fruit

Active Ingredient:  
Sulfur ..... 49.50%  
[2-tert-butyl-5(4-tert-butylbenzylthio)-  
4-chloropyridazin-3(2H)-one] ..... 4.03%  
Other Ingredients: ..... 46.47%  
Total ..... 100.00%

U.S. Patent Number: 4,877,787

EPA Reg. No. 7969-

EPA Est. No. 39578-TX-1

## KEEP OUT OF REACH OF CHILDREN CAUTION

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Harmful if inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

### FIRST AID

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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.  
In case of medical emergencies, call 1-800-832-HELP.

BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

## 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.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeved shirt and long pants; Socks and shoes; Chemical-resistant gloves made of any waterproof material; and goggles or face shield.

Follow the 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.

## ENGINEERING CONTROLS STATEMENT

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.

## ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish 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. Do not contaminate water when disposing of equipment washwaters or rinsate. Do not apply when weather conditions favor drift from target area. Drift and runoff from treated areas may be hazardous to fish in adjacent sites. This product is highly toxic to bees. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Application early in the morning or at dusk is suggested.

## ENDANGERED SPECIES CONCERNS

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

## 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 area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

All applicable directions, restrictions, precautions and Conditions of Sale and Warranty are to be followed. This labeling must be in the user's possession during application.

Net Contents: 2.5 Gallons • 11.2 Pounds per Gallon

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### 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 24 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: A) Coveralls; B) Chemical-resistant gloves made of any waterproof material; C) Shoes plus socks D) Goggles or face shield.

### STORAGE AND DISPOSAL

- 1. Prohibitions:** Do not contaminate water, food or feed by storage or disposal.
- 2. Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.
- 3. Container Disposal:** 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.
- 4. Storage:** Store in original container only and keep sealed. Store in closed storage areas. Use caution when moving, opening, closing or pouring. Store in cool place.

### GENERAL INFORMATION

This package contains Desperado®, an aqueous suspension, miticide/insecticide/fungicide. Desperado is a selective contact miticide/insecticide/fungicide that controls pests in groves when used at recommended rates. (Refer to Table 1. Desperado Application Rate Table.) Desperado provides knockdown and residual control. A good performance evaluation can be made 10 days after treatment. For optimum results, Desperado should be applied as pest populations build and prior to reaching economic thresholds.

**Mite Resistance Management:** Desperado use should be alternated with other miticides as part of a mite management program to minimize resistance. Repeated use of the same miticide has been documented to result in the buildup of resistant strains of mites. To reduce the potential of obtaining a population of acaricide-resistant mites, the grower should alternate products of differing modes of action. Consult with your local or state extension personnel for advice on miticide use and selection.

**Cleaning Spray Equipment:** Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and by triple rinsing the equipment before and after applying this product.

### APPLICATION INSTRUCTIONS

Desperado may be applied by ground equipment using either diluted or concentrated sprays. Apply recommended rates of Desperado as instructed by Crop-Specific Information Section. Spray the last 3 rows windward of surface water using nozzles on only one side with the spray directed away from surface water. Avoid spraying over the tops of trees by adjusting or turning off the top nozzles. Shut the nozzles off on the side away from the grove when spraying the outside row. Shut the nozzles off when turning at the ends of the rows and when passing tree gaps in rows.

**COVERAGE:** Apply Desperado in sufficient water to ensure thorough coverage of foliage and fruit. Thorough coverage is required for optimum control. To achieve adequate coverage, use proper spray pressure, nozzle type, nozzle spacing, volume per acre, and tractor speed. Consult spray nozzle and accessory guide for information pertaining to proper equipment calibration.

### GROUND APPLICATION

**WATER VOLUME:** Use 50-400 gallons of spray solution per broadcast acre for optimal performance.

### ADDITIVES

Silicone additives such as Sylgard® 309 are recommended for improved performance of Desperado®. Additives should be considered for certain conditions such as obtaining better spray coverage, adhesion or penetration of product onto leaf or plant surfaces. Consult a local agricultural authority for more information concerning additives.

### GENERAL TANK MIXING INFORMATION

The phytotoxic potential of Desperado aqueous suspension miticide/insecticide/fungicide has been assessed on a wide variety of trees with no phytotoxicity observed. However, all varieties and cultivars have not been tested with possible tank mix combinations. Local conditions can also influence crop tolerance and may not match the conditions in existence at the time of original product testing. Therefore, before using Desperado, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

**COMPATIBILITY TEST FOR MIX COMPONENTS:** Before mixing components, always perform a compatibility jar test. For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** section using 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions. When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

### MIXING ORDER

- 1) WATER:** Begin by agitating a thoroughly clean sprayer tank three-quarters (3/4) full of clean water.
- 2) AGITATION:** Maintain constant agitation throughout mixing and application.
- 3) WATER-DISPERSIBLE PRODUCTS (such as DESPERADO®):** Pour required material into water. Wait until the product is evenly mixed in the spray tank before continuing.
- 4) WATER-SOLUBLE PRODUCTS**
- 5) EMULSIFIABLE CONCENTRATES** (except crop oil concentrates).
- 6) WATER SOLUBLE ADDITIVES** (such as nutrients).
- 7) REMAINING QUANTITY OF WATER:** Maintain constant agitation during application.

### RESTRICTIONS AND LIMITATIONS

- Maximum Seasonal Use Rate: Do not apply more than a total of 2.2 gallons of Desperado® aqueous suspension miticide/insecticide/fungicide (1.0 pound Pyridaben a.i.) per acre, per season.
- Do not make more than 2 applications of Desperado® per year.
- Allow a minimum of 30 or 90 days between sequential applications of Desperado®, as specified in the Crop Specific Information section.
- Preharvest Interval (PHI): Do not apply within 7 days of harvest.
- Do not make applications of Desperado® within 30 days before or after a spray oil application.
- Do not tank mix Desperado® with a crop oil concentrate.
- Restricted Entry Interval (REI) 24 hours.
- Do not apply Desperado® by air.
- Do not apply through any type of irrigation equipment.
- Do not use less than 50 gallons of water per acre.
- DRIFT:** Do not apply Desperado® when weather conditions favor drift to surface water. Do not apply within 110 feet upwind of surface water or when wind speed is above 8 m.p.h.. Do not apply during a temperature inversion.
- Applications of Desperado during periods when shade temperatures exceed or are likely to exceed 90° F may cause injury to foliage and fruit.

TABLE 1. DESPERADO APPLICATION RATE TABLE

Pests Controlled	Rate Per Acre Per Application
Black Margined Aphid Broad Mite European Red Mite Grape Leafhopper (nymphs) McDaniel Spider Mite Pacific Spider Mite Peach Silver Mite Southern Red Mite Two Spotted Spider Mite Variegated Leafhopper Virginia Creeper Leafhopper Williamette Spider Mite Yellow Pecan Aphid	1 to 1.1 Gallon
Pests Suppressed	Rate per Acre
Powdery Mildew Rust Scab Silverleaf Whitefly	1 to 1.1 Gallon

### CROP-SPECIFIC INFORMATION

#### Tree Nuts Group and Pistachio

Apply Desperado® in 50-400 gallons of water per acre. Use higher water volumes to ensure adequate concentration in full size trees with dense foliage.

**Specifically for Almonds-** Applications may be made after petal fall through Summer. For best control, pest populations must be building with primarily immature stages present at the time of application. Allow a minimum of 30 days between applications.

See Table 1 for application rates for specific pests.

TABLE 2. CROP-SPECIFIC RESTRICTIONS AND LIMITATIONS

Crop	Minimum Time Application to Harvest (PHI)	Maximum Rate per Acre per Application	Maximum Rate per Acre per Season	Aircraft Application
Apricots <sup>1</sup> Cherries <sup>1</sup>	300 Days	1.1 Gals.	2.2 Gals.	NO
Nectarines Peaches Plums Prunes	7 Days	1.1 Gals.	2.2 Gals.	NO
<b>Tree Nuts Group:</b> Almond Beech Black Walnut Brazil Butternut Cashew Chestnut Chinquapin English Walnut Filbert Hickory Macadamia Pecan Pistachio	7 Days	1.1 Gals.	2.2 Gals.	NO

<sup>1</sup>Do not apply Desperado® to Apricots and Cherries in California.

### Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests.

The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. All such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

Sylgard® is a registered trademark of Dow Corning Corporation, U.S.A.  
U.S. Patent # 5,145,977

DESPERADO® is a registered trademark of WILBUR-ELLIS Company.

F-904

**In case of Emergency, Call CHEMTREC: (800) 424-9300**

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**11.2 Pounds per Gallon**

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Research Triangle Park, NC 27709

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