

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

OFFICE OF CHEMICAL, SAFETY AND POLLUTION PREVENTION

Anne Downs Wilbur-Ellis Company 2903 S. Cedar Avenue Fresno, CA 93725

OCT 1 2 2011

**Product Name:** 

Golden-Dew

EPA Reg. No.:

2935-407

Subject:

Application for Pesticide Notification dated 7/21/2011

**EPA Decision Number:** 

453083

Dear Ms. Downs:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action(s) requested fall within the scope of PRN 98-10.

The Agency acknowledges the addition of the alternate brand name "Golden Micronized Sulfur."

The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have questions concerning this letter, please contact Erin Malone at 703-347-0253 or via email at malone.erin@epa.gov.

Sincerely, Mary L. Waller

Mary Waller

Product Manager 21

Fungicide Branch

Registration Division (7504P) Office of Pesticide Programs

# **Golden Micronized Sulfur**

(FUNGICIDE AND INSECTICIDE)

S: 902404

ACTIVE INGREDIENT:		By Wt.
Sulfur		92.0%
OTHER INGREDIENTS		8.0%
	TOTAL	100.0%

EPA Reg. No. 2935-407

EPA Est. No. 2935-CA-12

# KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID		
	Have the product container or label with you when calling a poison control center or doctor, or going for treatment.		
If on Skin or Clothing:	-Take off contaminated clothingRinse skin immediately with plenty of water for 15-20 minutesCall a poison control center or doctor for treatment advice.		
If in Eyes:	<ul> <li>-Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>-Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>-Call a poison control center or doctor for treatment advice.</li> </ul>		

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: A) Long-sleeved shirt; B) Long pants; C) Chemical resistant gloves made of any waterproof material; D) Shoes plus socks; E) Protective eyewear. 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.

#### **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, 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 wash waters. Do not apply when weather conditions favor drift from treated areas.

### PHYSICAL AND CHEMICAL HAZARDS

Sulfur dust suspended in air ignites easily. Keep away from heat, sparks, or flame. Do not smoke while applying this product.

#### **USER SAFETY RECOMMENDATIONS**

User should: 1)Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2)Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3)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.

#### 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 restrictedentry 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) Protective eyewear.

#### **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.

MIXING INSTRUCTIONS: Pour specific amount of Golden Micronized Sulfur into 1/3 filled spray tank. Add balance of water to fill tank. Keep agitator running during filling and spraying operations. Do not allow mixture to stand. Do not use in low-volume gear-type spray equipment.

#### **DIRECTIONS FOR USE (continued)**

**APPLICATION INSTRUCTIONS:** The desired ratio of Golden Micronized Sulfur to water must not exceed 2 pounds per gallon.

#### **Dilute Application:**

Field: Specified rate in 20 to 50 gallons of water per acre.

Orchard: Specified rate in 200 to 400 gallons of water per acre

#### **Concentrated Application:**

**Field:** Specified rate in 5 to 10 gallons of water per acre. **Orchard:** Specified rate in 20 to 100 gallons of water per acre.

#### **Aerial Application:**

**Field:** Specified rate in 3 to 20 gallons of water per acre. **Orchard:** Specified rate in 10 to 20 gallons of water per acre.

**CHEMIGATION:** Do not apply this product through any irrigation system unless this chemigation section is followed. Apply this product only through sprinkler (center pivot, lateral move, end tow, side or wheel roll, traveler, big gun, solid set, or hand move) irrigation systems.

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 system (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 adjustment should the need arise.

# CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

- 1) 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.
- 2) Chemigation systems connected to public water systems must obtain 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.
- 3) The pesticide injection pipeline must contain a functional, automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump.

- 4) 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 system is either automatically or manually shut down.
- 5) 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.
- 6) 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.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8) Apply at rate specified on the container label for individual crops. Do not allow mixture to stand. Keep agitator running during application. Apply at end of irrigation period. Do not operate irrigation system after application until deposit has thoroughly dried.

#### SPRINKLER CHEMIGATION

- 1) 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.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) 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.
- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) 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.
- 6) 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 and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment.
- 8) Apply at rate specified on the container label for individual crops. Do not allow mixture to stand. Keep agitator running during application. Apply at end of irrigation period. Do not operate irrigation system after application until deposit has thoroughly dried.

Do not use sulfur with oil or within two weeks of an oil application unless in a dormant, delayed dormant, or postharvest application on pome and stone fruit. For citrus, do not apply within 21 days of an oil spray. When growing crops for processing, consult the processor before applying sulfur. For control of MITES, use the higher rates shown under conditions of high pest pressure. For control of FUNGI, use higher rates shown when weather conditions indicate a potential for increased pest pressure.

Sulfur will cause severe fruit and leaf injury to sulfur sensitive crops. Do not allow this material to drift into sulfur sensitive melons, squash, cucumbers, apricots or other plants which may be injured by sulfur.

Do not apply when shade temperatures exceed or are likely to exceed 90° F. Sulfur may burn foliage and fruit during periods of high temperatures and under certain climate conditions.

Consult with State Agricultural Experiment Station or State Agricultural Extension Service personnel for additional information consistent with label cautions and directions.

COMPATIBILITY: Golden Micronized Sulfur is compatible with most pesticides. Because conditions vary, mix a small amount of the pesticide prior to application to examine their compatibility. ALWAYS ADD THE PESTICIDE INTO THE MIXED GOLDEN MICRONIZED SULFUR. Follow more restrictive labeling of any tank mix partner. Do not tank mix with any product which contains a prohibition on tank mixing. WILBUR-ELLIS recommends the use of a surfactant such as Sylgard® 309 to improve coverage.

#### **APPLICATION DIRECTIONS**

#### **FIELD CROPS**

CROP	PEST	PRODUCT RATE	DIRECTIONS
Alfalfa	Lygus Pacific Mite Red Spider Mite Strawberry (Atlantic) Mite	10-20 lbs./acre	Repeat at 1 to 2 week intervals as needed.
Cereals: Barley Corn Oats Rye Sorghum	Atlantic Mite (sm. grains only) Grass Banks Mite Pacific Mite Powdery Mildew Red Spider Mite Two Spotted Mite	6-15 lbs./acre	Apply when disease first appears or when mites appear on bottom leaves and repeat as necessary.
Clover	Powdery Mildew Rust Mite Spider Mites	15-20 lbs./acre	Apply when crop is in bud stage or at first sign of disease or mites. Repeat at 7 to 10 day intervals or as necessary.
Cotton	Atlantic Mite Red Spider Mite	2-10 lbs./acre	Begin when infestation first occurs and repeat at 1 to 2 week intervals as necessary or with regularly scheduled insecticide program.
	Lygus	10-15 lbs./acre	
Grass Seed Crops	Rust Mite Timothy Mite	3-6 lbs./acre	Apply at first sign of disease or mites and repeat as necessary.
Hops	Red Spider Mite	3-4 lbs./acre	Apply when mites first appear and repeat as necessary.
Peanuts	Leaf Spot Powdery Mildew Red Spider Mite Rust Mite	3-12 lbs./acre	Apply at early leaf stage and repeat as necessary.

### **APPLICATION DIRECTIONS**

# FIELD CROPS (continued)

CROP	PEST	PRODUCT RATE	DIRECTIONS
Soybeans	Leaf Spot Powdery Mildew	6-15 lbs./acre	Apply when disease first appears and repeat as necessary.
Sugar Beets	Pacific Mite Powdery Mildew Red Spider Mite Strawberry (Atlantic) Mite Two-Spotted Mite	3-40 lbs./acre	Apply when disease or mites first appear and repeat at 3-4 week intervals or as necessary.
Spearmint Peppermint	Powdery Mildew	4-6 lbs./acre	Apply when mint is 5-6" tall or when disease first appears. Repeat twice, at 30 day intervals. Do not apply within 30 days of harvest.

## **VEGETABLE CROPS**

CROP	PEST	PRODUCT RATE	DIRECTIONS
Asparagus	Rust Mite	15-35 lbs./acre	Use after cutting stops. Irrigate and cultivate before applying sulfur. Repeat at 7-10 day intervals throughout season.
	Brown Mite Two-Spotted Mite	6-10 lbs./acre	Apply when mites first appear and repeat as necessary.
Beans Peas	Powdery Mildew Spider Mite Thrips	6-10 lbs./acre	Begin application when pest first appears and repeat as necessary.
	White Mold	10-20 lbs./acre	
Carrots Garlic Onions Peppers	Blight Botrytis Petrobia Mite Powdery Mildew	10-15 lbs./acre	
Celery	Early Blight Late Blight	3-10 lbs./acre	Begin as soon as plants emerge, repeat at 7-10 day intervals or as necessary.
Broccoli Brussels Sprouts Cabbage Cauliflower Greens: Collards, Kale, Mustard	Powdery Mildew Red Spider Mite	3-10 lbs./acre	Begin application when pest first appears and repeat as necessary.
Lettuce	Powdery Mildew Rust Mite Spider Mite	5-6 lbs./acre	Apply at early leaf stage and repeat every 14 days as needed.
Melons Squash	Powdery Mildew	2-4 lbs./acre	Apply when disease first appears, repeat as needed. Sulfur can injure plants, especially when temperatures reach 95° F. Do not use on sulfur sensitive varieties.

### **APPLICATION DIRECTIONS**

## **VEGETABLE CROPS** (continued)

CROP	PEST	PRODUCT RATE	DIRECTIONS
Rutabagas Table Beets Turnips	Powdery Mildew Red Spider Mite	3-10 lbs./acre	Apply at early leaf stage and repeat applications every 14 days as needed.
Potatoes	Powdery Mildew Red Spider Mite Two-Spotted Mite	6-10 lbs./acre	Apply at early leaf stage and repeat applications every 14 days as needed.
Tomatoes	Powdery Mildew Tomato Russet Mite	15-30 lbs./acre	Apply when pest first appears and repeat as necessary or with regularly scheduled insect program.

## FRUITS, NUTS, AND BERRIES

CROP	PEST	PRODUCT RATE	DIRECTIONS
Almonds	Brown Almond Mite European Red Mite Flat Mite Pacific Mite Red Spider Mite Silver Mite Strawberry (Atlantic) Mite Two-Spotted Mite	10-20 lbs./acre	Apply at bloom or early petal fall and repeat as necessary, usually at 10-14 day intervals or after a period of wet weather.
	Brown Rot Scab	8-30 lbs./acre	
Apples	Blister Mite Powdery Mildew Red Spider Mite Scab	10-20 lbs./acre	Apply at pre-bloom and petal fall. Apply with cover sprays throughout the season. Do not apply on sulfur sensitive varieties except in dormant or delayed dormant stage.
Avocados	Brown Mite	10-20 lbs./acre	Apply at first sign of mites and repeat as necessary.
Blackberries Blueberries Boysenberries Currants Dewberries Gooseberries Huckleberries Loganberries Raspberries	Powdery Mildew	4-10 lbs./acre	Apply at first sign of disease and repeat as necessary.
Citrus	Citrus Mite Citrus Flat Mite Flat Mite Red Spider Mite Rust Mite Silver Mite Six-Spotted Mite Yuma Spider Mite	4-30 lbs./acre	Apply in any spray NOT CONTAINING OIL. Do not apply 21 days preceding or following an oil application.

## FRUITS, NUTS, AND BERRIES (continued)

CROP	PEST	PRODUCT RATE	DIRECTIONS
Figs	Fig Rust Mite	15-30 lbs./acre	Apply in spring and early summer when damage to foliage (russeting) appears. Repeat application if necessary.
Grapes	Blister Mite Bud Mite Powdery Mildew Red Spider Mite	3-5 lbs./acre	Apply when shoots are 2-3" long, repeat before blossoms open and continue as necessary on 7-10 day cycle. Concord and other Labrusca type grapes may be injured by sulfur.
Mangos	Powdery Mildew	10-30 lbs./acre	Begin application before bloom, repeat at bloom, after fruit set and 3 weeks later or as necessary.
Pears	Blister Mite Pear Psylia Powdery Mildew Rust Mite Scab	10-20 lbs./acre	Apply in dormant, delayed dormant or post-harvest stages only. During clusterbud, reduce rate to 6 lbs./acre. Do not apply after bloom.
Pecans	Powdery Mildew Red Spider Mite Sooty Mold Two-Spotted Mite	5-10 lbs./acre	Apply throughout season as needed. Some varieties are sensitive to sulfur sprays under certain condition. Do not apply unless varieties are known to be tolerant of sulfur.
Pistachios	Citrus Flat Mite	10-20 lbs./acre	Apply when mites first appear and repeat as necessary. May be applied to bearing or non-bearing trees up to day of harvest.
Stone Fruits: Cherries Nectarines Peaches Plums Prunes	Blossom Blight Brown Rot Coryneum Blight Flat Mite Leaf Spot Powdery Mildew Rust Mite Red Spider Mite Silver Mite	15-25 lbs./acre	Apply at bloom or early petal fall and repeat as necessary, usually 10-14 days or after a period of wet weather. Do not apply after jacket stage on Plums, Prunes or Nectarines. For Brown Rot, apply when fruit starts to ripen. Apply as a postharvest foliar for Cherry Leaf Spot.
Strawberries	Powdery Mildew Red Spider Mite	4-10 lbs./acre	Apply at early leaf stage and repeat as necessary. Do Not use on sulfur sensitive varieties.
Walnuts Macadamias	Almond Mite Broad Mite Pacific Mite Red Spider Mite Two-Spotted Mite	10-30 lbs./acre	Apply throughout season as needed. Some varieties are sensitive to sulfur sprays under certain conditions. Do not apply unless varieties are known to be tolerant to sulfur.

#### **ORNAMENTALS**

CROP	PEST	PRODUCT RATE	DIRECTIONS
Asters	Powdery Mildew	5-6 lbs./100 gal.	Spray for full coverage, wetting
Carnations	Rust Mite	or (3	both sides of leaves. Begin
Calendulas	Leaf Spot	tablespoons per	applications when new growth
Cedars	Powdery Mildew	gallon)	appears in the Spring and
Cherry Laurels		Ì	repeat every 5-10 days as
Chrysanthemums			needed and after rain.
Hollyhock			
Juniper			
Smilax			
Spruce			
Clematis	Leaf Spot		
Columbine			·
English Ivy			
Laurel			
Petunia			·
Sage			
Cosmos	Powdery Mildew	5-6 lbs./100 gal.	Spray for full coverage, wetting
Crepe Myrtle		or (3	both sides of leaves. Begin
Dahlia		tablespoons per	applications when new growth
Delphinium		gallon)	appears in the Spring and
Dogwood			repeat every 5-10 days as
Euonymus			needed and after rain.
Gladiolus			
Golden Fleece			
Hibiscus	İ		
Holly Lady's Mantle			•
Ligustrum		· ·	
Lilac			
Poplars			
Silver Vine			
Spirea	· ·		
Sunflower			
Sweet Pea			
Verbena			
Violets			
Willow		·	
Zinnias			
Roses	Black Spot		
	Powdery Mildew		

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#### STORAGE AND DISPOSAL

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

- Pesticide Storage: Store in sealed original container in a cool, dry area away from any heat or ignition source. Store in closed storage area. Use caution when moving, opening, closing or pouring.
- 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 Handling: NONREFILLABLE CONTAINER. Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling, if available; otherwise, dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Conditions of Sale and Limitation of Warranty and Liability:

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using the product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

ALL STATEMENTS MADE HEREIN ARE SUBJECT TO APPLICABLE LAW, AND TO THE EXTENT THERE IS ANY INCONSISTENCY OR CONTENTION, APPLICABLE LAW SHALL GOVERN.

The Directions for Use of the product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of many different factors including, without limitation, manner of use or application, weather, combination with other products, or crop conditions. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Manufacturer and Seller harmless from any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label. EXCEPT FOR THIS WARRANTY, THE PRODUCT IS FURNISHED "AS-IS," AND NEITHER SELLER NOR MANUFACTURER MAKES ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE SELECTION, PURCHASE OR USE OF THIS PRODUCT; SELLER AND MANUFACTURER SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE BEYOND WHAT IS STATED ON THE LABEL. Buyer and User accept all risks arising from any use of this product, including without limitation, uses contrary to label instructions, or under conditions not reasonably foreseeable to (or beyond the control of) Seller or Manufacturer.

Neither Manufacturer nor Seller shall be liable for any incidental, consequential or special damages resulting from the use or handling of this product. THE EXCLUSIVE REMEDY OF THE BUYER OR USER, AND THE EXCLUSIVE LIABILITY OF MANUFACTURER AND SELLER, FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT, OR, AT THE ELECTION OF MANUFACTURER OR SELLER, THE REPLACEMENT OF THE PRODUCT.

These Conditions of Sale and Limitation of Warranty and Liability shall be interpreted, unless otherwise required by the law of the state of purchase, in accordance with the laws of the State of California, excluding its conflicts of laws rules, and may not be amended by any oral or written agreement.

WLBUR-ELLIS Logo® is a registered trademark of WLBUR-ELLIS Company.

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

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

MANUFACTURED IN U.S.A. BY:
WILBUR-ELLIS COMPANY
P.O. BOX 16458 • FRESNO, CA 93755

F-060210-1

Batch	Code	
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**NET CONTENTS: 30 POUNDS**