51036-352

24/2014 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Catherine Holmes BASF Corporation/BASF Sparks LLC 26 Davis Drive Research Triangle Park, NC 27709

JUN 2 4 2014

Subject: Kumulus DF

EPA Reg. No. 51036-352

Your resubmission by email dated June 20, 2014 Original application dated February 11, 2014

Decision Number: 488227

Updated label to incorporate Agency requested editorial revisions

Dear Ms. Holmes:

The amended labeling referred to above, submitted in connection with registration under the Federal, Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. A stamped copy of your label is enclosed for your records.

You must submit one (1) copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact me at (703) 305-5410.

Sincerely,

Hope A. Johnson

Product Manager (21)

Fungicide Branch

Registration Division (7505P)

KUMULUS® DF

fungicide/acaracide

Active Ingredient:

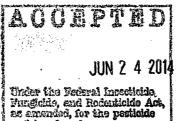
EPA Reg No: 51036-352 **EPA Est. No:**

KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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.)

See inside for complete First Aid, Precautionary Statements, Directions For Use. Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

In case of emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357). Have the product container with you when calling a poison center or doctor or going for treatment.



registered under EPA Reg. No.

BASF Sparks, LLC 26 Davis Drive, Research Triangle Park, NC 27709



FIRST AID

If swallowed:

- 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 the poison control center or doctor.
- DO NOT give anything to an unconscious person.

If in eyes:

- Hold eyes 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 eyes.
- Call a poison control center or doctor for treatment advice.

If on skin and clothing:

- · 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.

HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

PRECAUTIONARY STATEMENTS...

Hazards to Humans and Domestic Animals

CAUTION. Harmful if swallowed. Avoid breathing spray mist. Avoid contact with eyes, skin, and clothing.

In Case of Emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC

1-800-424-9300

BASF Corporation

1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment
- Your local poison control center (hospital)
- BASF Corporation:

1-800-832-HELP (4357)

ASPCA (animal health):

1-800-345-4735

Personal Protective Equipment (PPE)

Some materials that are chemically resistant to this product are listed below. For more options, refer to **Category A** on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- · Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- · Protective eyewear

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

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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.

USER SAFETY RECOMMENDATIONS

Users should:

- 1. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 2. Remove clothing/PPE 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.

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 rinsate or equipment washwaters. **DO NOT** apply when weather conditions favor drift from treated areas.

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 the area during application. For any requirements specific to your state or tribe, consult the 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.

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), 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:

- 1 Coveralls
- 2. Chemical-resistant gloves made of any waterproof material
- 3. Shoes plus socks
- 4. Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries and greenhouses. **DO NOT** allow people or pets on treated surfaces until the spray has dried. **DO NOT** enter or allow others to enter the treated area until sprays have dried.

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

Pesticide Storage

DO NOT store above 104° F. Store in dry place away from heat, sparks or open flame.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

(for paper or plastic bags)

Nonrefillable Container. DO NOT reuse or refill this container. After completely emptying container into application equipment, dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

USE INFORMATION

Kumulus® DF fungicide/acaracide is a water dispersible sulfur granule.

Crop Tolerance

All listed crops are tolerant to Kumulus DF.

Spray Coverage

Foliage must be thoroughly covered with spray. Dense leaf canopies can prevent adequate spray coverage.

Cleaning Application Equipment

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions before and after applying this product.

APPLICATION INSTRUCTIONS

Apply the specified rate of **Kumulus DF** listed in the **Application Rates** section, **Ornamentals and Turf** and **Crops**, when pests or diseases are first noticed. Apply at 1 to 2 week intervals, or as needed and after wet weather.

Air Application Water Volume:

- Orchards Use no less than 10 gallons of water per acre.
- All other applications Apply 5 to 20 gallons of water per acre.

Ground Application (Concentrate) Water Volume:

- Orchards Apply 20 to 100 gallons of water per acre.
- All other applications Use no less than 5 gallons of water per acre.

Ground Application (Dilute) Water Volume:

- Orchards Apply 100 to 800 gallons of water per acre.
- All other applications Apply 20 to 60 gallons of water per acre.

Chemigation Instructions

Apply this product only through one or more of the following types of systems: sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation system(s).

DO NOT apply this product through any other type of irrigation system.

PRECAUTION: Corrosion of aluminum and carbon/galvanized steel irrigation sprinkler systems may be experienced with the use of sulfur fungicides. The end-user assumes all responsibility for use of this product through such systems. If the user elects to apply this product through such systems, it is essential that all application equipment containing this product be thoroughly flushed with clean water after each day's use. Continue to operate system with clean water until all product has cleared the last sprinkler head.

Crop injury or lack of effectiveness can result from non-uniform 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 adjustments should the need arise.

A. Center Pivot, Traveler, Big Gun, Motorized Lateral Move, End Tow, and Side (Wheel) Roll Irrigation Equipment: Operate system and injection equipment at normal pressures recommended by the manufacturer of injection equipment used. Fill tank or injection equipment with water. Operate system for one complete circle for center pivot or one complete run for the other recommended equipment, measuring time required, amount of water injected, and acreage contained in circle or run. Mix recommended amount of product for acreage to be covered into same amount of water used during calibration and inject into system continuously for one revolution or run, but continue to operate irrigation system until the product has been cleared from last sprinkler head. Spray mixture in the chemical supply tank must be agitated at all times, otherwise settling and uneven application may occur.

B. Solid Set and Hand Move Irrigation Equipment: Determine acreage covered by sprinkler. Fill tank of injection equipment with water and adjust flow to use contents over a thirty to forty-five minute period. Mix desired amount of product for acreage to be covered into quantity of water used during calibration and operate entire system at normal pressures recommended by the manufacturer of injection equipment used for amount of time established during calibration. Provide constant mechanical agitation in the mix tank to insure that the product will remain in suspension during the injection cycle. This product can be injected at the beginning or end of the irrigation cycle or as a separate application. Stop injection equipment after treatment is completed and continue to operate irrigation system until pesticide is cleared from last sprinkler head.

Safety Devices

(1) The systems designated above 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) All pesticide injection pipelines 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

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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 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.

Systems Connected to Public Water Systems

Public water systems 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 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.

For additional instructions on safety precautions refer to statements (2), (3), (4), (6), and (7) in the section on **Safety Devices**.

ADDITIVES AND TANK MIXING INFORMATION

BASF does not have a list of recommended additives or adjuvants for use with **Kumulus® DF** fungicide/acaracide.

Mixing Order

- 1. Water Agitate a thoroughly clean sprayer tank 1/2 full of clean water.
- 2. Kumulus DF Add specified amount of Kumulus DF.
- 3. If necessary, add a few drops of oil to avoid foaming.
- 4. Remaining quantity of water

Maintain constant agitation during application.

Tank Mixing Information

BASF does not have a list of recommended tank mixes for use with this product. Consult your local County Agricultural Extension Agent or agricultural advisor for assistance.

RESTRICTIONS

- Restricted Entry Interval (REI): 24 hours
- **DO NOT** apply to or allow spray drift on sulfur-sensitive plants such as D'Anjou pears, apricots, chrysanthemums, cranberries, spinach, or other sensitive crops listed on this labeling.
- DO NOT apply if temperatures during or within 3 days after application are expected to exceed 90°F in the area to be treated.

• **DO NOT** use within 2 weeks of an oil spray treatment, except for dormant, delayed dormant or postharvest applications with a suitable oil. For citrus, **DO NOT** apply within 21 days of an oil spray.

PRECAUTIONS

- Sulfur may burn foliage when temperature is excessively high.
- When growing crops for processing, consult the processor before applying sulfur.

APPLICATION RATES

Ornamentals and Turf

Table 1. Kumulus® DF fungicide/acaracide Ornamentals and Turfgrass Requirements

| Crop | Target Disease | Rate (lbs product/acre) | Directions |
|--|--|-------------------------|---|
| Asters Carnations | Powdery mildew | 3 to 10 (ground) | Apply when disease first appears and repeat at 5 to 10 day |
| Calendula Cherry laurels Hollyhock Smilax | Leaf spot Powdery mildew | 3 to 20 (air) | intervals. |
| Clematis Columbine lvy (English) Laurel Petunia Sage | Leaf spot | | |
| Cosmos Crape myrtle Dahlia Delphinium Gladiolus Ligustrum Sunflowers Sweet peas Violets Zinnias | Powdery mildew | | |
| Roses | Powdery mildew Black spot | | |
| Turf (all types and applications including, but not limited to, golf putting and non- putting greens with no cutting restrictions) | Suppression of: Fusarium patch Bentgrass Bluegrass Fescue Ryegrass Take-all in bentgrass | 10 to 55 . | Monthly application September through May. Apply as a preventative measure prior to the outbreak of disease. Use higher specified rate when condition favor disease. Use higher specified rate when temperatures are less than 80° F. can cause Poa annua decline. The addition of Sylgard® 309 adjuvant will aid in providing necessary thorough coverage. |

Crops

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements

| Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|---|--|-------------------------|---|
| Alfalfa | Lygus Pacific and strawberry (Atlantic) mites Red spider mites | 12 to 25 | Repeat at 1 to 2 week intervals. |
| Almonds Cherries Plums Prunes | Brown rot blossom blight Cherry leaf spot Flat mite Powdery mildew Red spider mite Silver mite | 10 to 30 | Apply at bloom or early petal fall. Repeat as necessary, usually 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. |
| Apples Pears (dormant, delayed dormant, or postharvest) | Blister mite Pear psylla Red spider mite Two-spotted mite | 10 to 20 | Apply with suitable spray oil postharvest and during the dormant periods of bud development. DO NOT apply to sensitive varieties of pears except at these stages. |
| Apples Pears | Blister mite Powdery mildew Red spider mite Scab | 10 to 20 | DO NOT apply to D'Anjou pears or sensitive apple varieties (i.e., Ontario or cox orange). Apply prebloom and petal fall. Apply with cover sprays throughout the season at 10 to 14 day intervals. |
| Artichokes (all varieties) | Leaf spot | 10 to 20 | Begin when disease first appears and repeat at 7 to 10 day intervals. |
| Asparagus* | Rust mites | 10 to 30 | Use after cutting. Irrigate and cultivate before applying. Repeat at 7 to 10 day intervals through fern growth season. |
| Avocados | Brown mite | 10 to 30 | Apply when mites are first noticed. |

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements (continued)

| Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|---|--|----------------------------|--|
| Beans Broccoli Brussels sprouts Cabbage Cauliflower Celery Collards Kale Mustard greens Peas Peppers Potatoes Rutabagas Turnips | Powdery mildew Red spider mite Septoria leaf spot | 3 to 10 | Start at early leaf stage. Repeat application every 10 to 14 days with or without other pesticides immediately after a rain. |
| Blackberries Boysenberries Dewberries Loganberries Raspberries | Powdery mildew | 6 to 15 | Begin when new shoots are 6 inches long and before blossoms open. Repeat at 10 day intervals or as necessary. |
| Blueberries Currants Gooseberries Huckleberries | Powdery mildew | 6 to 15 | Begin when disease first appears. Repeat at 7 to 10 day intervals or as necessary. |
| Carrots Dry shallots Garlic Onions (dry and green) | Petrobia mite Powdery mildew | 3 to 10 | Begin when disease first appears. Repeat at 7 to 10 day intervals or as necessary. |
| Citrus | Broad mite Bud mite Flat mite Red spider mite Rust mite Six-spotted mite Silver mite Thrips Yuma spider mite | 8 to 20 | Apply in any spray not containing oil. DO NOT apply within 21 days of an oil application. |
| Clover | Powdery mildew Red spider mites | 2 to 8 | Apply as needed. |

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements (continued)

| Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|---|---|----------------------------|--|
| Corn Small grains (sorghum, soybeans) | Atlantic mite (small grain only) Powdery mildew Suppression of: Grass banks mite Pacific mite Red spider mite Two-spotted mite | 6 to 15 | Apply when disease first appears and repeat as necessary or with the regularly scheduled insecticide program. |
| Cotton | Atlantic mite Red spider mite Two-spotted mite | 3 to 10 | Apply throughout season as necessary. California Only: Apply a maximum of 5 lbs product/acre per application. Reapply as necessary. |
| Cowpeas | Rust | 2 to 8 | Begin soon after seedlings emerge. Repeat at 7 to 10 day intervals as needed throughout the season |
| Cucumbers | Powdery mildew | 2 to 6 | Apply when disease first appears and repeat as necessary. DO NOT apply more than 2 lbs/A per application during periods of high temperatures. |
| Dates | Bank grass mites | 4 to 6 | Apply as needed. |
| Eggplants | Powdery mildew | 2 to 5 | Apply 2 to 5 lbs product/acre per application. Begin when first true leaves appear. Repeat at weekly intervals as needed. |
| Figs | Fig rust mite Eriophyid mites | 4 to 6 . or 15 to 30 | Apply 4 to 6 lbs product/acre in 100 gallons of water as a dilute application or 15 to 30 lbs product/acre as an air or concentrate application. Apply in spring and early summer when damage to foliage (russeting) appears. A second application may be necessary. |
| Flax | Powdery mildew | 2 to 8 | Begin at first sign of disease. Repeat at 7 to 10 day intervals or as necessary. |

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements (continued)

| Blister mite Bud mite Phomopsis Powdery mildew Red spider mite Clover mite Clover mite Clover mite Clover mite Pacific mite Rust Pacific mite Rust Pacific mite Pacific mite Rust Pacific mite Pacific Miter Pacific Pacifi | Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|--|------------|--|-------------------------|---|
| Winter grain mite Clover mite Winter grain mite Clover mite From late fall to mid-spring, Repeat application as necessary. Apply as needed for suppression. Apply at early leaf stage and repeat every 14 days or as needed. Apply at early leaf stage and repeat every 14 days or as needed. Apply with mite sprays during season to increase the effectiveness of miticides. NOTE: Certain varieties are sensitive to sulfur sprays under certain conditions. DO NOT apply unless the varieties are sensitive to sulfur sprays under certain conditions. DO NOT apply unless the varieties are known to be tolerant of sulfur. Mangoes Powdery mildew Powdery mildew Powdery mildew From the disease first appears and repeat as necessary. Weltons Powdery mildew At to 6 Apply when infection appears. Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Peaches Blossom blight Peaches Powdery mildew Repeat as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. | Grapes | Blister mite Bud mite Phomopsis Powdery mildew | | the cutworm spray, early shoot period and through season on a 7 to 14 day schedule or with |
| Lettuce (head and leaf) Powdery mildew Red spider mite Rust Macadamias Macadamias Walnuts Almond mite Broad mites European red mite Red spider mite Two-spotted mite Powdery mildew Powdery mildew Powdery mildew Powdery mildew Fowdery mildew Powdery mildew A to 6 Apply when infection appears. Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Blossom blight Brown rot Powdery mildew Red spider mite Silver mite | Grass hay* | Winter grain mite | 10 to 25 | from late fall to mid-spring. |
| (head and leaf) Red spider mite Rust repeat every 14 days or as needed. Macadamias Almond mite Broad mites Apply with mite sprays during season to increase the effectiveness of miticides. NOTE: Certain varieties are sensitive to sulfur sprays under certain conditions. DO NOT apply unless the varieties are known to be tolerant of sulfur. Mangoes Powdery mildew 10 to 30 Begin before bloom. Repeat in bloom, after fruit set, and 3 weeks later or as necessary. Melons Powdery mildew 5 to 25 Treat when the disease first appears and repeat as necessary. Sulfur can injure plants, especially when the temperature reaches 95°F. DO NOT use on sulfur sensitive varieties. Mint Powdery mildew 4 to 6 Apply when infection appears. Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Blossom blight Brown rot Powdery mildew Red spider mite Silver mite 10 to 30 Apply at bloom or early petal fall. Repeat as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. | Hops | | 2 to 4 | Apply as needed for suppression. |
| Walnuts Broad mites European red mite Pacific mite Red spider mite Two-spotted mite The truit set, and 3 weeks later or as necessary. Treat when the disease first appears and repeat as necessary. Sulfur can injure plants, especially when the temperature reaches 95°F. DO NOT use on sulfur sensitive varieties. Mint Powdery mildew A to 6 Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Peaches Blossom blight Brown rot Powdery mildew Red spider mite Silver mite Silver mite Silver mite Packet as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. | [| Red spider mite | 5 to 6 | repeat every 14 days or as . |
| Repeat in bloom, after fruit set, and 3 weeks later or as necessary. Melons Powdery mildew 5 to 25 Treat when the disease first appears and repeat as necessary. Sulfur can injure plants, especially when the temperature reaches 95°F. DO NOT use on sulfur sensitive varieties. Mint Powdery mildew 4 to 6 Apply when infection appears. Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Peaches Blossom blight Powdery mildew Red spider mite Silver mite Repeat as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. | 1 | Broad mites European red mite Pacific mite Red spider mite | 10 to 20 | season to increase the effectiveness of miticides. NOTE: Certain varieties are sensitive to sulfur sprays under certain conditions. DO NOT apply unless the varieties are known to |
| appears and repeat as necessary. Sulfur can injure plants, especially when the temperature reaches 95°F. DO NOT use on sulfur sensitive varieties. Mint Powdery mildew 4 to 6 Apply when infection appears. Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in the fall. Nectarines Peaches Blossom blight Brown rot Powdery mildew Red spider mite Silver mite appears and repeat as necessary. Sulfur can injure plants, especially when fruit starts to ripen. | Mangoes | Powdery mildew | - 10 to 30 | Repeat in bloom, after fruit set, and 3 weeks later or as |
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| Peaches Brown rot Powdery mildew Red spider mite Silver mite Repeat as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit starts to ripen. | Mint | Powdery mildew | 4 to 6 | Apply additional sprays at 3 week intervals until pink bud stage or 4 weeks before harvest. Apply as often as necessary to cover new growth or until growth ceases in |
| | | Brown rot Powdery mildew Red spider mite | 10 to 30 | Repeat as necessary, 10 to 14 days or after wet weather. For brown rot of fruit, apply when fruit |
| Olives Olive mites 4 to 10 Apply as needed. | Olives | Olive mites | 4 to 10 | Apply as needed. |

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements (continued)

| Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|--------------|--|----------------------------|--|
| Papayas** | Mites (except Carmine mites) | 8 to 26 | Apply when mites first appear and repeat as necessary to maintain control. DO NOT apply in combination with emulsifiable pesticide formulations since foliar injury may occur. May be applied up to 24 hours before harvest. DO NOT apply to low vigor or moisture stressed plants. DO NOT apply prior to or during periods of excessively high temperatures, periods of low rainfall or within 2 weeks of an oil spray. |
| Peanuts | Leaf spot Powdery mildew Red spider mite | 3 to 8 | Start in early leaf stage. Repeat applications as necessary, usually 10 to 24 days. |
| Pecans | Eriophylid mite Flat mite Leaf spot Powdery mildew Red spider mite Silver mite Sooty mold Two-spotted mite | 10 to 20 | Apply at bloom or early petal fall. Repeat as necessary, usually 10 to 14 days or after wet weather. NOTE: Some varieties of pecans are sensitive to sulfur sprays under certain conditions. DO NOT apply unless varieties are known to be tolerant of sulfur. |
| Pistachios | Citrus flat mite | 10 to 25 | Apply when mites first appear. Repeat as necessary. When temperatures exceed 95° F lower rates and more frequent applications are advised in order to avoid crop injury. |
| Pomegranates | Mites | 3 to 10 | Begin application in May or June. Make additional applications on a 3 to 4 week schedule, or as necessary. Use higher specified rates if past mite damage has been high. If temperatures exceed 95° F, lower rates and more frequent applications are advised in order to avoid crop injury. |
| Quince | Blossom blight Brown rot Powdery mildew | 10 to 30 | Begin application at early leaf stage and repeat as necessary. DO NOT use on sulfur sensitive varieties. |

Table 2. Kumulus® DF fungicide/acaracide Crop-specific Requirements (continued)

| Crop | Target Disease/ Pests | Rate (lbs product/acre) | Directions |
|--------------|-----------------------------------|----------------------------|--|
| Seed alfalfa | Red spider mite | 3 to 5 | Apply 3 to 5 lbs/A as necessary. Repeat at two week intervals as necessary. |
| Strawberries | Powdery mildew Red spider mite | 5 to 10 | Start in early leaf stage, repeat applications at 10 to 14 day intervals with or without other pesticides. For powdery mildew, begin at first signs of disease and repeat as necessary. DO NOT use on sulfur sensitive varieties. |
| Squash | Powdery mildew | 5 to 10 | Apply when disease first appears and repeat as needed. Sulfur can injure plants, especially when temperature reaches 95°F. DO NOT use on sulfur sensitive varieties. |
| Sugar beets | Powdery mildew Red spider mite | 5 to 20 | Apply at first indication of problem with or without other pesticides. Repeat as necessary. |
| Table beets | Powdery mildew Red spider mite | 3 to 5 | Apply at first indication of problem with or without other pesticides. Repeat as necessary. |
| Tomatoes | Russet mite | 3 to 20 | Thorough coverage is required. |

^{**} Only registered in Hawaii

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 must be followed carefully. However, 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 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. To the extent consistent with applicable law, 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.

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