# MICRO FLO SULFUR

ACTIVE INGREDIENT:

Sulfur as S ..... 52.0% 48.0% 100.0%

Contains 6 pounds Sulfur per gallon

#### KEEP OUT OF REACH OF CHILDREN

### CAUTION

# STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water. Get medical

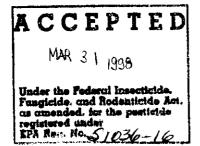
attention.

IF IN EYES: Flush eyes with plenty of water. Call a physician if

irritation persists.

See Elsewhere On Label For Additional Precautionary Statements

Manufactured By MICRO FLO COMPANY P.O. BOX 5948 LAKELAND, FLORIDA 33807



# PRECAUTIONARY STATEMENTS Hazards To Humans And Domestic Animals

### CAUTION

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

### PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- 1. Long-sleeved shirt and long pants
- 2. Waterproof gloves
- 3. Shoes plus socks
- 4. Protective eyewear
- 5. Chemical-resistant headgear for overhead exposure

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.

### USER SAFETY RECOMMENDATIONS

Users 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.

# ENVIRONMENTAL HAZARDS

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. Do not apply when weather conditions favor drift from the areas treated. Do not apply where runoff is likely to occur. Do not use in a manner or at a time other than in accordance with label directions because animal, plant or crop injury, or other undesirable results may occur.

#### PHYSICAL HAZARDS

Keep away from heat, sparks, or flame.

# 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 and restricted-entry intervals. 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. Waterproof gloves
- 3. Shoes plus socks
- 4. Protective eyewear
- 5. Chemical-resistant headgear for overhead exposure

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Product may be stored and if frozen may generally be restored after thawing and mixing. Repeated freezing-thawing cycles may impair utility.

CONTAINER DISPOSAL: Triple rinse or equivalent and offer for recycling or reconditioning or dispose of in a sanitary landfill or by incineration if permitted by state and local authorities. PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

# MIXING RECOMMENDATIONS

Before using, shake or stir until smooth. Pour recommended amount of Sulfur into partially filled spray tank. Add balance of water to fill tank. Keep agitated while filling and spraying. The strong adhesive properties of this Sulfur act as a sticker on the plant, and the sticking characteristic necessitates the flushing of equipment with water after each day's use. Sulfur in any form is corrosive material. To reduce the effect, equipment should be flushed daily. Higher rates are for severe disease conditions.

### DIRECTIONS FOR DILUTION

### DILUTE APPLICATION

Ground: Specified rate in 20 to 60 gallons of water per acre. Orchard: Specified rate in 100 to 800 gallons of water per acre.

#### CONCENTRATED APPLICATION

Ground: 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

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

# GENERAL 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 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 <u>clean</u> 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.

В. 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 fortyfive 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 Provide constant mechanical established during calibration. 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 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.

### SPECIFIC RECOMMENDATIONS FOR VARIOUS CROPS

Some crops may be damaged by sulfur under certain climatic conditions. Do not use on any crop unless sulfur has been shown to be safe in your locality. Do not allow spray to drift on to sulfur-sensitive crops such as apricots, cranberries, and Anjou pears. Certain varieties of apples, pears, strawberries, cucurbits (cucumber, cantaloupe, melon, squash), and spinach are susceptible to injury under certain climatic conditions. Sulfur may burn foliage or fruit when temperature is high. Do not apply at such times. Do not use within two weeks of an oil spray treatment or petroleum solvent based pesticide products such as emulsifiable For citrus do not apply within 21 days of an oil concentrates. When growing crops for processing, consult the processor spray. before applying sulfur.

### SOFT FRUIT

BLACKBERRIES, BOYSENBERRIES, DEWBERRIES, LOGANBERRIES, BLUEBERRIES, GOOSEBERRIES, HUCKLEBERRIES, AND CURRANTS:

For control of powdery mildew. Apply 2 1/2 gallons per acre before blossom and continue at 10 day intervals as necessary.

#### GRAPES:

For control of powdery mildew, Phomopsis, bud mite, blister mite and red spider mite.

Mildew, Phomopsis- Apply throughout the season at 7 to 14 day intervals according to the stage of development of the vegetation and intensity of the attack. Before flowering - Apply 7 pints per acre. After flowering - Apply 1 gallon per acre.

Mites - Apply up to 13 pints per acre at budburst, making sure to

wet thoroughly.

NOTE: Concord and other labrusca type grapes may be injured.

#### RASPBERRIES:

For control of powdery mildew. Apply 2 1/2 gallons per acre each week from first bloom to fruit set.

### STRAWBERRIES:

For control of powdery mildew, red spider mite, and two-spotted mite. Apply 5 1/3 to 13 pints per acre at early leaf stage and continue as necessary.

#### ORCHARDS

#### ALMONDS:

For control of brown rot, blossom and twig blight, leaf spot, rust, scab, powdery mildew, silver mite, flat mite, almond mite, European red mite, Atlantic mite, Pacific mite, two-spotted mite, brown mite, and red spider mite. Apply 1 1/3 to 4 gallons per acre. Apply at bloom or early petal fall. Repeat as necessary, usually 10 to 14 days or after a period of wet weather.

# APPLES, PEARS:

For control of scab. Pre-bloom through calyx sprays: Before flowering: Apply 1 1/2 to 5 gallons per acre. Cover sprays: After flowering: Apply 3/4 to 2 1/2 gallons per acre.

For control of powdery mildew, two-spotted mite, European red mite, blister mite, and red spider mite. Pre-bloom through calyx sprays: Apply 3 to 5 gallons per acre. Cover sprays: Apply 2 to 2 1/2 gallons per acre.

#### AVOCADOS:

For control of brown mite. Apply 5 gallons per acre as needed.

#### CITRIIS .

For control of red spider mite, flat mite, rust mite, silver mite, broad mite, bud mite, six-spotted mite, two-spotted mite, clover mite, Yuma spider mite, and thrips.

Apply 1 to 8 gallons per acre. For aerial application use sufficient water to provide adequate coverage. Ground Application: Use 7 to 8 pints per 100 gallons of water. Aerial Application: Use 4 to 8 gallons per acre in sufficient water to provide adequate coverage.

#### FIGS:

For control of mites including fig rust mite, almond mite, European red mite, common red spider mite, Pacific mite, and Eriophyid mites. Apply 2/3 to 7 1/2 gallons per acre. Apply when mites first appear. Since the effectiveness of sulfur varies in different localities, State Agricultural Experiment Stations should be consulted as to the effectiveness before application.

#### MACADAMIAS:

For control of Pacific mite, almond mite, two-spotted mite, red spider mite, and broad mite. Apply 1 1/3 to 2 2/3 gallons per acre. Apply throughout the season as needed.

### MANGOES:

For control of powdery mildew. Apply 5 gals. per acre before flowering and continue at intervals of 20 days.

#### OLIVES:

For control of olive mite. Apply  $8\ 1/4$  to  $11\ 1/3$  gallons per acre. Do not use sulfur in hot weather as damage may result to crop and foliage.

# PEACHES, PLUMS, CHERRIES, NECTARINES, PRUNES:

For control of powdery mildew, brown rot, leaf spot, Coryneum blight, rust, scab, silver mite, flat mite and red spider mite. Pink and bloom sprays: 1 1/2 to 5 gallons per acre. Petal fall, shuck and cover sprays: 3/4 to 5 gallons per acre. Application to mature nectarines may cause discoloration. Apply 5 gallons per acre at bloom and repeat as necessary at intervals of 12 days.

#### PECANS:

For control of powdery mildew, leaf spot, sooty mold, silver mite, flat mite, two-spotted mite, red spider mite, and Eriophyid mites (including pecan and hickory). Apply 2/3 to 2 2/3 gallons per acre. Apply throughout the season as needed. 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:

For control of mites including citrus flat mite. Apply 1 1/3 to 8 1/4 gallons per acre. Apply when mites first appear and repeat as necessary. May be applied by ground or air. When temperatures exceed  $95^{\circ}F$ , lower rates and more frequent applications are advised in order to avoid crop injury.

#### POMEGRANATES:

For control of mites. Apply 1/2 to 1 1/3 gallons per acre. Begin applications in May or June. Make additional applications on a 3 to 4 week schedule, or as necessary. Use higher 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:

For control of brown rot, powdery mildew, and scab. Apply 5 2/3 to 9 3/4 gallons per acre. Begin before diseases are expected to appear. Repeat at 7 to 10 day intervals or as necessary.

#### WALNUTS:

For control of Pacific mite, almond mite, two-spotted mite, red spider mite, European red mite, and broad mite. Apply 1 1/3 to 3 1/3 gals. per acre as required.

# FIELD CROPS

# ALFALFA (including seed alfalfa):

For control of lygus mites, Pacific mites, strawberry mites, Atlantic mites, and red spider mites. Apply 1/2 to 3 1/3 gallons per acre. Apply throughout the season as necessary.

# CEREALS (Corn, wheat, barley, oats, rye, sorghum):

For control of powdery mildew, red spider mite, two-spotted mite, Pacific mite, Atlantic mite, and grass banks mite. Apply 2/3 to 2 1/2 gallons per acre when mites first appear and continue as necessary.

# CLOVER:

For control of powdery mildew and spider mites. Apply  $2\ 1/2$  to 4 gallons per acre at first sign of disease or infestation and repeat at 7 to 10 day intervals as needed to maintain control.

### COTTON:

For control of red spider mite, Atlantic mite, Pacific mite, two-spotted mite, and lygus mite. Apply  $3\ 5$  to 10 2/3 pints per acre as necessary.

#### COWPEAS:

For control of rust. Apply 1 to 4 gallons per acre. Begin soon after seedlings emerge. Repeat at 7 to 10 day intervals through the season.

#### FLAX:

For control of powdery mildew. Apply 3 1/3 to 5 gallons per acre. Begin at first sign of disease. Repeat at 7 to 10 day intervals or as necessary.

#### GRASS SEED CROPS:

For control of timothy mite. Apply 5 gallons per acre. Begin when infestation first occurs and repeat at 7 to 10 day intervals as needed to maintain control.

#### HOPS:

For mite (including red spider mite, European red mite, and Pacific mite) suppression. Apply 1/3 to 7 1/2 gallons per acre. Begin when infestation first occurs and repeat as needed.

# PEANUTS:

For control of powdery mildew, leaf spot, rust, two-spotted mite, and red spider mite. Apply  $3 \, \frac{5-1}{3}$  to  $8 \, 1/2$  pints per acre at early leaf stage and repeat at 18 day intervals.

# PEPPERMINT, SPEARMINT:

For control of powdery mildew. Apply 1/2 to 3/4 gallon per acre when mint is 5 to 6 inches tall or when disease appears. Repeat twice, at 30 day intervals. Do not apply within 30 days of harvest.

#### SOYBEANS:

For control of leaf spot, powdery mildew, two-spotted mite, Atlantic mite, and Pacific mite. Apply 1/2 to 2 gallons per acre at early leaf stage and repeat every 14 days as necessary.

# SUGAR BEETS, TABLE BEETS:

For control of powdery mildew and red spider mite. Apply 2/3 gallon per acre as required at 18 day intervals.

## SUGARCANE:

For control of rust, apply 1 gallon per acre as required by disease pressure in sufficient water for thorough coverage.

#### VETCH -

For control of rust. Apply 4 to 6 1/2 gallons per acre. Begin at first sign of disease. Repeat at 7 to 10 day intervals.

# **VEGETABLES**

#### GLOBE ARTICHOKES:

For control of leaf spot. Apply 4 to 5 2/3 gallons per acre. Begin when disease appears and repeat at 7 to 10 day intervals as necessary.

#### **ASPARAGUS:**

For control of rust, apply 1 1/3 to 4 gallons per acre. Use after cutting stops. Irrigate and cultivate before applying the sulfur. Repeat at 7 to 10 day intervals throughout the season. For control of two-spotted mite and brown mite, apply 2/3 to 1 gallon per acre as necessary.

#### BEANS:

For control of leaf spot, powdery mildew, rust, red spider mite, two-spotted mite, Atlantic mite, Pacific mite, and thrips. Apply 3 to 9 pints per acre at early leaf stage and repeat every 14 days as necessary.

#### CARROTS:

For control of powdery mildew and Petrobia mite. Apply 13 pints per acre at early leaf stage and repeat every 14 days as necessary.

### CUCURBITS (melons, cucumbers, squash):

For control of powdery mildew. Apply 4 gals. per acre when disease first appears and repeat as necessary

PEAS, BROCCOLI, BRUSSELS SPROUTS, CABBAGE, CAULIFLOWER, COLLARDS, KALE, MUSTARD GREENS, RUTABAGAS, PEPPERS, POTATOES, TURNIPS: For control of powdery mildew, Septoria leaf spot (on peas only), rust, red spider mite, broad mite, two-spotted mite, Atlantic mite, and Pacific mite. Apply 3 to 10 2/3 pints per acre at early leaf stage and repeat every 10 to 14 days as necessary.

### EGGPLANTS:

For control of powdery mildew. Apply 3 1/3 to 5 2/3 gallons per acre. Begin when first true leaves appear. Repeat at weekly intervals.

# LETTUCE (Head and Leaf):

For control of powdery mildew, rust, and red spider mite. Apply 2/3 to 3/4 gallon per acre at early leaf stage and repeat every 14 days or as needed. Thorough coverage is required.

#### OKRA:

For control of powdery mildew. Apply 2 to 4 pints per acre when disease first appears and repeat at 7 day intervals as necessary.

# ONIONS, GARLIC, DRY ONIONS, DRY SHALLOTS:

For control of powdery mildew and Petrobia mite. Apply 1/2 to 1/3 gallons per acre when disease first appears and repeat as necessary.

#### SPINACH:

For control of powdery mildew and rust. Apply 1 1/3 to 5 gallons per acre. Apply when disease first appears. Repeat at 7 to 10 day intervals.

# TOMATOES:

For control of powdery mildew, russet mite, and two-spotted mite apply 4 to 10 2/3 pints per acre as necessary. Thorough coverage is required.

#### ORNAMENTALS AND ROSES

For control of powdery mildew, leaf spot, rust, black spot (roses), red spider mite, and two-spotted mite. Apply 3 to 8 pints in 100 gallons of water when disease first appears and repeat at 5 to 10 day intervals as required. During periods of humid or rainy weather it may be necessary to make applications as often as every 2 to 3 days.

NOTE: Consult State Agricultural Station or State Extension Service Specialist for rate recommended for your local area.

### TURF

For use on turf, all types and applications (including but not limited to golf putting/nonputting greens) with no cutting height restrictions to suppress Fusarium patch in bentgrass, bluegrass,

ryegrass, and fescue and take-all in bentgrass. Apply 1 1/3 to 7 1/3 gallons per acre. Make monthly applications September through May. Apply as a preventative measure prior to the outbreak of disease. Use the higher rate when weather conditions indicate a potential for increased disease expression. Higher rates should be used when temperatures are below  $80^{\circ}\text{F}$ , lower rates when temperatures exceed  $80^{\circ}\text{F}$ . Can cause Poa annua decline. Thorough coverage is required.

#### NUTRIENT USE

This product contains sulfur, which is an essential nutrient for plant growth. Therefore, when applied as directed, this product can be considered a necessary component of the total plant nutrient profile. This product may be applied as a micronutrient supplement to any crop listed on this label at rates given in the directions for use for that crop. Local agricultural authorities including your State Agricultural Experimental Station or Extension Specialist may be a reliable source for additional information pertaining to this use. Some crops may be damaged by sulfur under certain climatic conditions. Refer to section titled "Specific Recommendations for Various Crops" for additional precautions.

#### FOR USE AS A SOIL AMENDMENT

This product may be applied with ground equipment, aircraft or sprinkler irrigation.

# Soil Application Rates, All Crops

Maintenance applications	ı gallon	per	acre
Moderate deficiency1-2			
Severe deficiency2-3	gallons	per	acre

Use general rates when leaf and soil tests are not available. For every 10 pounds of nitrogen, most crops need 1 pound of sulfur. When applied to the soil, this product can be mixed with fertilizer or water. Use 1 to 3 gallons of sulfur per acre depending on the nitrogen requirement of the crop. If other forms of sulfur are used, adjust the above rates accordingly.

#### CONDITIONS OF SALE

MICRO FLO WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSE STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS FOR USE. 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 THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE

BEYOND THE CONTROL OF MICRO FLO. IN NO CASE SHALL MICRO FLO BE LIABLE FOR THE CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

EXCEPT AS EXPRESSLY PROVIDED HEREIN, MICRO FLO MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE.

Read all directions carefully.