# Rhapsody<sup>™</sup> ASO

AN AQUEOUS SUSPENSION Biofungicide

# **NOP Logo: For Organic Production**

Contains a minimum of 1x 109 CFU/g

EPA Reg. No. 69592-XX

EPA EST. NO.:

1 2 3 4 5 69592 67545- 66728- 37429- 69592-- AZ-1 GA-2 GA-2 CA-1 JUN 2 5 2004

Under the Federal Insecticide.
Prangistide and Researchide Ast.
es cancel for the posticide
registered under
EFA Reg. No. 19592-19

Superscript corresponds to last digit of lot number stamped on container

U.S. Patent Nos. 6,060,051, 6,103,228, 6,291,426 and 6,417,163 on QST 713 strain of Bacillus subtilis

Net contents: [Agricultural: 16 fl oz (1 pint), 20 fl oz, 24 fl oz, 32 fl oz (1 quart), 64 fl oz ( $\frac{1}{2}$  gallon), 128 fl oz (1 gallon), 2.5 gallons, 3.0 gallons or 5 gallons; Home and Garden: 16 fl oz(1 pint), 20 fl oz, 24 fl oz, 32 fl oz (1 quart), 64 fl oz ( $\frac{1}{2}$  gallon) or 128 oz (1 gallon)]

#### KEEP OUT OF REACH OF CHILDREN

#### CAUTION

#### FIRST AID

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

**IF IN EYES:** 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 eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN:** Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

[For smaller container sizes:]

[See attached booklet for First Aid Statements.]

[Peel back tab for First Aid and Precautionary Statements and Directions for Use.]

## PRECAUTIONARY STATEMENTS - Agricultural Use

# HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- NIOSH approved respirator with any N, R, P or HE filter

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

OPTIONAL 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:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS – Agricultural Use**

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 or runoff from treated areas.

# For Agricultural Use

## **DIRECTIONS FOR USE – Agricultural Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

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 emergencies such as leaks or spills, call 24-hour toll-free CHEMTREC hotline at 1.800.424,9300.

#### 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 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 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, waterproof gloves, shoes plus socks.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or green houses.

# STORAGE AND DISPOSAL - Agricultural Use

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

**STORAGE:** Store in a dry area inaccessible to children. Store in original containers only. Keep container closed when not in use.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water when disposing of equipment rinsate.

CONTAINER DISPOSAL: Agricultural Use: For 1.0-gallon, 2.5-gallon, 3-gallon, or 5-gallon plastic containers — Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### **GENERAL USE INFORMATION – Agricultural Use**

Rhapsody ASO is an effective broad spectrum, preventative biofungicide for the control of many important foliar and soil-borne diseases. Rhapsody ASO is an ideal resistance management tool given its unique, multiple modes of action. It may be applied alone, in alternating spray programs or in tank mixes with other registered crop protection products. For maximum effectiveness, apply Rhapsody ASO prior to or in the early stages of disease development or [apply Rhapsody ASO when conditions favor disease development prior to the onset of disease.]

#### INTEGRATED PEST MANAGEMENT (IPM)

For disease resistance management, integrate Rhapsody ASO into an overall disease and pest management strategy whenever fungicide use is necessary. Follow practices known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

Be sure use of this product conforms to resistance management strategies, which may include rotating and/or tank-mixing with other products with different modes of action.

#### **USE RATE DETERMINATION - Agricultural Use**

Carefully read and follow all label directions, use rates and restrictions. Use maximum label rates and shortened spray intervals for conditions conducive to rapid disease development. For proper application, determine the area to be treated, the recommended label use rate and select appropriate spray volume to give good canopy penetration and coverage of plant parts to be protected. Prepare only the amount of spray solution required to treat the measured acreage. Accurate spray equipment calibration is essential prior to use.

#### PREHARVEST INTERVAL - Agricultural Use

Rhapsody ASO can be applied up to and including the day of harvest.

# **APPLICATION INSTRUCTIONS – Agricultural Use**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower/treatment coordinator are responsible for considering all of theses factors when making decisions.

**GROUND:** Be sure to maintain agitation during mixing and application to assure uniform product suspension. Thorough coverage of all foliage is essential for effective disease control.

Rhapsody ASO can be applied in commonly used ground equipment, hose-end, pressurized greenhouse, and hand-held prayers. To achieve good coverage use proper spray pressure, gallonage per acre, nozzles, nozzle spacing and ground speed. Consult spray nozzle and accessory catalogues for specific information on proper equipment calibration.

AERIAL: Do not apply this product by air.

**CHEMIGATION**: This product can be applied to soil in greenhouses and enclosed nurseries through sprinkler or drip type irrigation systems. Do not apply this product through any other type of irrigation system. Refer to the Chemigation Directions for Use section of this label for general and specific directions and precautions. Use the application rate indicated for the appropriate crop as specified in the Use Recommendations section.

#### MIXING INSTRUCTIONS - Agricultural Use

MIXING: Rhapsody ASO must be diluted with water for spray applications. Partially fill the spray tank with clean water and begin agitation. Add the specified amount of Rhapsody ASO to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. It is critical that the spray solution be agitated during mixing and application to assure a uniform suspension. Do not allow the spray mixture to stand overnight or for prolonged periods. Maintain a spray solution pH between 4.5 and 8.5.

Rhapsody ASO may be tank-mixed with other registered fungicides to enhance plant disease control. Do not exceed recommended dosage rates. Rhapsody ASO cannot be mixed with any product with prohibition against such mixing. Use of the resulting tank mix must be in accordance with the more restrictive label limitations and precautions.

COMPATIBILITY: Do not combine Rhapsody ASO in the spray tank with pesticides, surfactants or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions.

Rhapsody ASO is compatible with many commonly used pesticides, fertilizer and adjuvants. To ensure compatibility of tank-mix combinations they should be evaluated in a jar test prior to use, as follows: Using a suitable container add proportional amounts of products to water. Add wettable powders first, followed by water dispersible granules, then liquid flowables, and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible.

**ADDITIVES:** Rhapsody ASO is compatible with a wide range of additives. Since the product is primarily a protectant – and thorough coverage of all above-ground plant parts is required – it is recommended that an adjuvant [such as Biotone™] known to be non-phytotoxic to the plant be added to the spray tank.

# APPLICATION RATES FOR USE ON ORNAMENTALS – Agricultural Use

Rhapsody ASO is a protectant fungicide for control of certain foliar diseases in the field, greenhouse, interiorscape, residential and commercial landscapes, nurseries, and shade house environments.

Rhapsody ASO can be applied to annual and perennial bedding plants, potted flowers, cut flowers, tropical foliage, and container grown trees and shrubs.

Greenhouse and Outdoor Grown Plants: Apply Rhapsody ASO at rates ranging from 2 to 8 quarts of product in 100 – 300 gallons of water per acre. Make applications on a 3- to 10-day schedule. Begin applications when conditions favor disease development prior to the onset of disease. or [Begin applications prior to or in the early stages of disease development.]

Under normal conditions apply Rhapsody ASO at a rate of 4 quarts of product per 100 - 300 gallons of spray solution per acre on a 7-day schedule. When conditions favor severe disease development shorten the spray interval or use a higher rate. Thorough coverage is essential for effective disease control. When more diluted or concentrated spray solutions are needed for the type of equipment being used, follow the "Use Determination" section of this label.

**Post Harvest:** For post-harvest dip applications on cut flower crops, dip cut flowers/buds in a solution containing 6 to 25 fluid ounces of Rhapsody ASO in 10 gallons of water soon after cutting. Immerse flowers for a period sufficient to provide thorough contact between cut flower/bud and the treatment solution. Use higher rates under conditions of heavy disease pressure.

Rhapsody ASO has been tested for phytotoxicity on the ornamental species listed below. Since it is impossible to test all of the species and cultivars listed on this label under all conditions it is recommended that a small-scale preliminary trial be conducted to check for sensitivity before using this product on a large number of plants, using the product in accordance with all label use directions.

# TABLE 1

#### PLANTS EVALUATED FOR PHYTOTOXICITY

#### **Annual and Perennial Flowering Plants:**

Alyssum	Asters	Azalea
Begonia	Calla lily	
Chrysanthemur	n Cyclamen	Dianthus
Dwarf Bee-Bain	Easter lily	
Garden phlox	Geraniums	Gerbera
Golden star	Hydrangea	Impatiens
Kalanchoe	Lanaria	Lisianthis
Lobelia	Marigolds	Orchids
Pansies	Petunia	Poinsettia
Portulaca	Ranunculus	Roses
Salvia spp.	Snapdragons	Stock
Verbena spp.	Vinca	Violas
Zinnias		

# Tropical foliage:

Aglonemea

Dieffenbachia

Dracaena spp. English Ivy Hibiscus

Leatherleaf Fern

Spathiphyllum

#### Trees and Shrubs:

Azalea

Boxwood

Crape myrtle

Dogwood

Gumbo azalea

Indian Hawthorn

Japanese maple

Legustrum japonicum

Lilac Photinia Loropetalum

Rhododendron

Rosaceae spp.

Soft Touch Holly

Spirea

#### **TABLE 2**

# ORNAMENTAL DISEASES CONTROLLED BY RHAPSODY ASO

Anthracnose -- Colletotrichum spp.

Bacteria -- Erwinia, Pseudomonas, Xanthomonas spp.

Black spot of rose -- Diplocarpon rosea

Botrytis -- Botrytis cinerea

Downy Mildew -- Peronospora spp.

Leaf spots -- Alternaria, Cercospora, Entomosporium, Helminthsporium, Myrothecium, Septoria spp.

Powdery mildew -- Erysiphe, Oidium, Podosphaera, Sphaerotheca spp.

Rust -- Puccinia spp.

Scab -- Venturia spp.

# Recommended Application Rates for Selected Greenhouse Crops –Agricultural Use (Rhapsody ASO has a 0-Day PreHarvest Interval for all crops contained on this label)

Green- house Crops	Diseases	Rate/Acre Qts./100 gallons spray mix	Application Instructions
Broccoli	Pin Rot  Alternaria/Xanthomona s complex	3 - 6	For suppression, begin applications when environmental conditions in the greenhouse are conducive to rapid disease development. Continue sprays at 7- day intervals. Thorough coverage is essential. Do not apply more than 6 qts. Rhapsody ASO per acre per application.
Carrot	Black Root Rot Black Crown Rot Alternaria spp.	2-4	Begin applications when environmental conditions in the greenhouse are conducive to rapid disease development. Continue sprays at 7- day intervals or as needed. Thorough coverage is essential. Do not apply more than 4 qts. Rhapsody ASO per acre per application.
	Bacterial Leaf Blight Xanthomonas campestris	6 – 10	Begin applications when environmental conditions in the greenhouse are conducive to rapid disease development.  Continue sprays at 7-day intervals or as needed. Use high rates and shorter intervals when conditions are conducive to rapid disease development. Thorough coverage is essential. Do not apply more than 10 qts. Rhapsody ASO per acre per application.
Cucurbits	Powdery Mildew Erysiphe spp. Sphaerotheca spp.	4 – 8	Begin applications soon after emergence or transplant and continue on a 7-day interval or as needed. When environmental conditions in the greenhouse and plant stage are conducive to rapid disease development, use Rhapsody ASO in a rotational program with other registered fungicides. Continue sprays at 7-day intervals or as needed. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per
Herbs/ Spices	Alternaria Leaf Blight Alternaria spp. Anthracnose Colletotricum spp. Bacterial Blight Pseudomonas syringae	4 - 6	Begin application when environmental conditions in the greenhouse are conducive to disease development. Repeat on a 7- to 10-day interval or as needed. Do not apply more than 6 qts. Rhapsody ASO per acre per application.

Green- house Crops	Diseases	Rate/Acre Qts./100 gallons spray mix	Application Instructions
Leafy Vegetable s (except <i>Brassica</i> )	Downy Mildew Bremia lactucae Peronospora spp.  Powdery Mildew Erysiphe cichoracearum	3-6	For suppression, use as a preventative treatment in early crop stages in a tank mix or alternating spray program with other registered fungicides. Apply as a foliar spray and begin applications when conditions favor disease development. Continue sprays at 7-to 10- day intervals or as needed. Apply in sufficient water to ensure complete coverage of entire plant. When conditions are conducive to rapid disease development, use Rhapsody ASO in a rotational program with other registered fungicides for downy mildew and powdery mildew control. Do not apply more than 6 qts. Rhapsody ASO per acre per application.

	Sclerotinia head and leaf drop Sclerotinia spp.	4-6	For control of early Sclerotinia head and leaf drop: Apply at planting or immediately following planting but prior to crop emergence as a 4- to 6-inch seed line treatment. Make a second application as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface within 7 days of thinning. Additional applications should be made on 10- to 14-day intervals if conditions for disease development persist. Use higher rates under conditions conductive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control. Thorough coverage is essential. Do not apply more than 6 qts. Rhapsody ASO per acre per application.  OR  For control of Sclerotinia head and leaf drop: Apply as a directed spray with multiple nozzles per each seed line in sufficient water to ensure thorough coverage of lower plant leaves and surrounding soil surface within 7 days of thinning or transplanting. Additional applications should be made on 10- to 14-day intervals if conditions for disease development persist. Use higher rates under conditions conducive to moderate to severe disease pressure. Light irrigation after application to incorporate the product may improve disease control. Thorough coverage is essential. Do not apply more than 6 qts. Rhapsody ASO per acre per application.
Onion	Botrytis neck rot Botrytis spp. Botrytis Leaf Blight Botrytis squamosa Onion Purple Blotch Alternaria porri Onion Downy Mildew Peronospora destructor	6 – 10	Begin applications when environmental conditions in the greenhouse are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. When conditions in the greenhouse are conducive to rapid disease development, use Rhapsody ASO in a rotational program with other registered fungicides for Botrytis neck rot control. Thorough coverage is essential. Do not apply more than 10 qts. Rhapsody ASO per acre per application.
Garlic	Botrytis Neck Rot Botrytis spp.	6-10	Begin applications when environmental conditions in the greenhouse are conducive to rapid disease development. Continue sprays at 7-day intervals or as needed. Under moderate to severe disease pressure, use Rhapsody ASO in a rotational program with other registered fungicides for Botrytis neck rot control. Thorough coverage is essential. Do not apply more than 10 qts. Rhapsody ASO per acre per application.
	Rust Puccinia porti	2-6	For suppression, use Rhapsody ASO as a part of a preventative disease control program in alternation or tank mix with other registered fungicides. Continue applications as needed. Thorough coverage is essential. Do not apply more than 6 qts. Rhapsody ASO per acre per application.

Green- house Crops	Diseases	Rate/Acr e Qts./100 gallons	Application Instructions
Pepper	Gray mold  Botrytis cinerea	4 – 8	Begin applications soon after emergence or transplant and continue on a 7-day interval or as needed. When environmental conditions in the greenhouse are conducive to rapid disease development, use Rhapsody ASO in a rotational program with other registered fungicides. Continue sprays at 7-day intervals or as needed. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per application.
	Powdery mildew Oidiopsis taurica	6 – 8	For suppression, begin applications soon after emergence or transplant and continue on a 7-day interval or as needed. When environmental conditions in the greenhouse are conducive to rapid disease development, use Rhapsody ASO in a rotational program with other registered fungicides. Continue sprays at 7-day intervals or as needed. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per application.
	Bacterial Spot Xanthomonas spp.	2 - 8	Begin applications soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5- to 7-day interval or as needed. When conditions are conducive to rapid disease development, use Rhapsody ASO in a tank mix program with copper-based bactericides registered for control of bacterial spot at labeled rates. Continue sprays at 7-day intervals or as needed. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre
Tomato	Early Blight Alternaria solani Late Blight Phytophthora infestans	4-8	For suppression, begin applications when plants are 4- to 6-inches high. Repeat applications at 5- to 7-day intervals or as needed. Use Rhapsody ASO in a rotational program with other registered fungicides for foliar disease control. Use shorter spray intervals under conditions conducive to rapid disease development. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per application.
	Powdery Mildew Leveillula taurica	4-8	Begin applications soon after emergence or transplant and when environmental conditions in the greenhouse are conducive to rapid disease development. Continue applications on 5- to 7- day intervals or as needed. Use maximum label rates under conditions conducive to rapid disease development. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per application.
	Bacterial Spot Xanthomonas spp.	2-8	Begin applications soon after emergence or transplant and when environmental conditions are conducive to disease development. Continue applications on a 5- to 7-day interval or as needed. When conditions are conducive to rapid disease development, use Rhapsody ASO in a tank mix program with copper-based bactericides registered for control of bacterial spot at labeled rates. Continue sprays at 7-day intervals or as needed. Thorough coverage is essential. Do not apply more than 8 qts. Rhapsody ASO per acre per application.

#### SOIL DRENCH APPLICATION - GREENHOUSES AND ENCLOSED NURSERIES

Rhapsody ASO is a broad spectrum biofungicide for the prevention, suppression and control of soil borne diseases on a wide range of annual and perennial bedding plants, potted flowers, foliage plants, deciduous trees and shrubs, and fruits and vegetables grown in protected environments. Rhapsody ASO enhances germination and plant growth by suppressing diseases caused by Rhizoctonia, Pythium, Fusarium and Phytophthora. Important Note: Rhapsody ASO is registered for soil applications ONLY in protected growing environments such as glasshouses or greenhouses.

#### APPLICATION INSTRUCTIONS - GREENHOUSES AND ENCLOSED NURSERIES

Mix 32 to 128 fl. oz of Rhapsody ASO with 100 gallons of water. Use higher application rates under conditions of heavy disease pressure.

Apply finished mixture at a rate to thoroughly soak the growing media through the root zone (1 pint / sq. ft. for each 3 inches of soil depth) as a drench or directed spray using hand held, mechanical or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems. Begin applications during or after seeding, sticking of cuttings or after transplanting to propagation beds, containers, pots or trays. Optimal performance is obtained with preventative treatments repeated every 21 – 28 days throughout the growing cycle. Rhapsody ASO can be mixed with chemical fungicides registered for soil applications.

#### **CHEMIGATION DIRECTIONS FOR USE:**

#### USE ONLY FOR SOIL TREATMENT IN GREENHOUSES AND ENCLOSED NURSERIES

#### **GENERAL REQUIREMENTS:**

Apply this product through sprinkler or drip type irrigation systems. Do not apply this product through any other type of irrigation system.

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

#### **APPLICATION INSTRUCTIONS:**

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Do not combine Rhapsody ASO with pesticides, surfactants or fertilizers for application through chemigation equipment if there has been no previous experience or use of the combination to show it is physically compatible, effective and non-injurious under your use conditions. Rhapsody ASO has not been fully evaluated for compatibility with all adjuvants or surfactants. It is advisable to conduct a spray compatibility test if mixture with adjuvants or surfactants is planned.
- 3) Determine area to be covered by sprinkler or drip system.
- 4) Fill injector solution tank with water and adjust flow rate to use contents over a 10- to 30-minute interval.
- 5) Determine the amount of Rhapsody ASO fungicide required to treat area.
- 6) Add the required amount of Rhapsody ASO fungicide into the same quantity of water used to calibrate the injection equipment.

#### RHAPSODY ASO MASTER LABEL

11/16

- 7) Maintain constant solution tank agitation during the injection period.
- 8) Operate system at normal pressures recommended by the manufacturer of the injection equipment and used for the time interval established during calibration.
- 9) Continue to operate the system until Rhapsody ASO fungicide solution has cleared the last sprinkler head.
- 10) Stop injection equipment after treatment is completed.

#### REQUIREMENTS FOR CHEMIGATION EQUIPMENT:

- 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 back flow."
- 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 inter-locking 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."

#### REQUIREMENTS FOR 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 regular 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 contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream form 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 flow 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.
- 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.

## For Home and Garden Use

NOP Logo: Can be used in organic gardening

## KEEP OUT OF REACH OF CHILDREN

# **CAUTION**

#### **FIRST AID**

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

IF IN EYES: 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 eye. Call a poison control center or doctor for treatment advice.

**IF ON SKIN:** Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

**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 by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

#### For smaller container sizes:

[See attached booklet for First Aid Statements.]

[Peel back tab for First Aid and Precautionary Statements and Directions for Use.]

# PRECAUTIONARY STATEMENTS— Home and Garden HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water.

#### **ENVIRONMENTAL HAZARDS – Home and Garden**

Do not apply directly to water. Do not contaminate water when disposing of equipment wash waters or rinsate.

#### **DIRECTIONS FOR USE - Home and Garden**

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

#### **GENERAL USE INFORMATION – Home and Garden**

Rhapsody ASO is a broad spectrum, preventative biofungicide recommended for the control or suppression of many important plant diseases (see Tables 2 and 3). Rhapsody ASO may be used on vegetables, fruits, nuts, flowers, foliage, trees, and shrubs located in residential landscapes.

#### MIXING AND APPLICATION INSTRUCTIONS - Home and Garden

Rhapsody ASO can be applied in commonly used pressurized hand-held and hose-end sprayers.

For best results, treat prior to foliar disease development or at the first sign of foliar disease infection. Repeat at 7-day intervals or as needed. Under conditions of high disease pressure, shorten the spray interval or, for ornamental plants, use the higher rate.

Rhapsody ASO can be applied up to and including the day of harvest.

#### ---MIXING:

#### Pressurized Hand-Held Sprayer Application Instructions:

For Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts, mix 4 fluid oz of Rhapsody ASO per gallon of water.

For Ornamental Plants – Annual and Perennial Flowering Plants, Tropical Foliage, Trees and Shrubs, mix 1 - 2 fluid ounces of Rhapsody ASO per gallon of water. Use the higher rate under conditions of high disease pressure.

Mix thoroughly and keep spray solution agitated during application. Do not allow spray mixture to stand overnight or for prolonged periods.

#### **Hose-End Sprayer Application Instructions:**

Shake well before using. Attach garden hose to spray nozzle. Turn on water supply. Point nozzle toward plants and turn water control knob to "On". Product will automatically mix with water as you spray the plants. To stop spraying, turn water control knob to "Off", then turn off water. Disconnect sprayer from hose.

Do not allow spray mixture to stand overnight or for prolonged periods.

<u>APPLICATION:</u> Spray leaves, stems and shoots to runoff providing complete coverage of the entire plant, equivalent to application rate of 4 fluid ounces or Rhapsody per 1000 square ft. As a guide, one container of product will cover approximately [4000 sq. ft. (16 oz)], [5000 sq. ft. (20 oz)], [6000 sq. ft. (24 oz)], 8000 sq. ft. (32 oz)].

For use on Apples/Pears, Broccoli, Carrot, Cherries, Cucurbits, Grapes, Leafy Vegetables, Onions/Garlic, Pepper, Tomato, and Walnuts.

For use on Ornamental Plants - Annual and Perennial Flowering Plants, Tropical Foliage, Trees and Shrubs.

# TABLE 1 PLANTS EVALUATED FOR PHYTOTOXICITY

#### **Annual and Perennial Flowering Plants:**

Alyssum **Asters** Azalea Calla lily Begonia Chrysanthemum Cyclamen Dianthus Dwarf Bee-Balm Easter lily Garden phlox Geraniums Gerbera Golden star Hydrangea Impatiens Kalanchoe Lanaria Lisianthis Lobelia Marigolds **Orchids** Petunia **Pansies** Poinsettia Ranunculus Portulaca Roses Salvia spp. Snapdragons Stock Verbena spp. Vinca Violas

Zinnias

# Tropical foliage:

Aglonemea

Hibiscus

Dieffenbachia

Dracaena spp. English Ivy

English Ivy Leatherleaf Fern

Spathiphyllum

#### Trees and Shrubs:

Azalea

Boxwood

Crape myrtle

Dogwood

Gumbo azalea

Indian Hawthorn

Japanese maple

Legustrum japonicum

Lilac

Loropetalum

Photinia

Rhododendron

Rosaceae spp.

Soft Touch Holly

Spirea

#### TABLE 2

# ORNAMENTAL DISEASES CONTROLLED BY RHAPSODY ASO

Anthracnose -- Colletotrichum spp.

Bacteria -- Erwinia, Psuedomonas, Xanthomonas spp.

Black spot of rose -- Diplocarpon rosea

Botrytis -- Botrytis cinerea

Downy Mildew -- Peronospora spp.

Leaf spots -- Alternaria, Cercospora, Entomosporium, Helminthsporium, Myrothecium, Septoria spp.

Powdery mildew -- Erysiphe, Oidium, Podosphaera, Sphaerotheca spp.

Rust - Puccinia spp.

Scab - Venturia spp.

#### TABLE 3

# VEGETABLE AND FRUIT DISEASES CONTROLLED OR SUPPRESSED BY RHAPSODY ASO

Bacterial Leaf Blight (Xanthomonas campestris)

Bacterial Speck (Psuedomonas syringae pv. Tomato)

Bacterial Spot (Xanthomonas spp.) -- suppression

Black Mold (Alternaria alternata)

Black Root Rot/Black Crown Rot (Alternaria spp.)

Botrytis Neck Rot (Botrytis spp.)

Downy Mildew (Bremia lactucae, Personospora spp.) and (Plasmopara viticola - suppression)

Early Blight (Alternaria solani)

Fire Blight (Erwinia amylovora) - suppression

Gray Mold (Botrytis cinerea)

Late Blight (Phtytophthora infestans)

Pin Rot (Alternaria/Xanthomonas complex) — suppression

Powdery Mildew (Uncinula necator, Erysiphe spp., Sphaerotheca spp., Oidiopsis taurica, Leveillula taurica, Podosphaera leucotricha)

Scab (Venturia spp.) - suppression

Walnut Blight (Xanthomonas campestris)

#### STORAGE AND DISPOSAL - Home and Garden

**STORAGE:** Store in a dry area inaccessible to children. Store in original container only. Keep container closed when not in use.

CONTAINER DISPOSAL: If empty: Do not reuse this container. Place in trash or offer for recycling if available.

**If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

#### **CONDITIONS FOR SALE AND WARRANTY**

AgraQuest warrants to those persons lawfully purchasing this product that at the time of the first sale of this product by Seller that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. EXCEPT AS PROVIDED ELSEWHERE IN WRITING CONTAINING AN EXPRESS REFERENCE TO THIS WARRANTY AND LIMITATION OF DAMAGES, SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTY, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent permitted by state law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent permitted by state law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

Rhapsody ASO is a registered trademark of AgraQuest, Inc.

© Copyright AgraQuest, Inc., 2004

AgraQuest, Inc. 1530 Drew Avenue Davis, California 95616 www.agraquest.com

