NOTE: This is a specimen label for electronic distribution. Always refer to product label on container for specific directions for use.

AGRI-FOS®

SYSTEMIC FUNGICIDE

For The Effective Control Of:

- **Phytophthora Diseases Associated with Sudden Oak Death**
- **Downy Mildew, Phytophthora & Pythium in Ornamentals & Bedding Plants**
- **Pythium in Turf**

MONTEREY

Active Ingredients:
Mono- and di-potassium salts of Phosphorous Acid* 45.8%
Other Ingredients: 54.2%
Total: 100.0%

*Contains 5.17 lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous Acid.
Equivalent to 3.35 lbs. Phosphorous Acid/gallon.

®AGRI-FOS is a registered trademark of AGRICHEM MANUFACTURING INDUSTRIES PTY. LTD.

EPA Reg. No. 71962-1-54705 EPA Est. No. 48498-CA-1

NET CONTENTS: Pints, Quarts, Gallons and 2½ Gallons

Manufactured For:
LAWN AND GARDEN PRODUCTS, INC.
P.O. Box 35000 • Fresno, CA 93745 • (559) 499-2100
www.montereylawngarden.com

KEEP OUT OF REACH OF CHILDREN

CAUTION

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 a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 Or Clothing:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
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.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. For use only in home gardens, on home lawns, and on home ornamentals and related home plants.

GENERAL APPLICATION INSTRUCTIONS

Apply AGRI-FOS® Systemic Fungicide by various application methods, including foliar spray, soil drench, soil incorporation, basal bark application and bare root dip. For foliar sprays, apply AGRI-FOS® Systemic Fungicide with sufficient water volumes for adequate coverage of foliage, according to plant type and growth stage. To ensure good coverage, spray to wetness, but avoid run-off.

MIXING INSTRUCTIONS

1. Fill the spray tank with 1/4 to 1/2 of the volume of water required before adding AGRI-FOS® Systemic Fungicide.
2. Add AGRI-FOS® Systemic Fungicide slowly to the tank and agitate.
3. Fill tank with balance of water to the desired volume.
4. Agitate during application.

Conversion Table				
1/8 fl. oz.	=	3/4 teaspoon (tsp.)		
1/4 fl. oz.	=	1½ tsp.		
1/3 fl. oz.	=	2 tsp.		
1/2 fl. oz.	=	3 tsp.		
2/3 fl. oz.	=	4 tsp.		
3/4 fl. oz.	=	4½ tsp.		
1 fl. oz.	=	2 tablespoons (Tbs.)	=	6 tsp.

CITRUS, FRUIT, NUT AND VEGETABLE APPLICATIONS

APPLES, CRAB APPLES, LOQUATS, PEARS & QUINCE*

Use AGRI-FOS® Systemic Fungicide for effective control of black spot, root and collar rot and fire blight in apples, crab apples, loquats, pears, and quinces.

Disease	Application Method	Rate	Application Program
Apple black spot or scab (Venturia inaequalis)	Foliar spray	1/2 fl. oz. per gal. of water	First application at open cluster. Last application at fifth cover or fruit at 2" to 2½" diameter. Total of 10 applications at 10 to 12 day intervals. When conditions are conducive to a black spot outbreak, apply AGRI-FOS® Systemic Fungicide immediately. **Note:** After 4 or 5 consecutive applications some yellowing of extension growth may be observed. If yellowing occurs use another fungicide until yellowing of leaves disappears.
Root and collar rot (Phytophthora cactorum) Fire Blight (Erwinia amylovora)	Foliar spray	Apply 1/2 - 1 tsp. per gal. of water	One to two month intervals between treatments. Under high disease pressure use higher application rate and shorter spray interval. Ensure thorough coverage.

* Not for use in California.

ASPARAGUS*

Use AGRI-FOS® Systemic Fungicide for effective control of crown rot & asparagus spear slime disease in asparagus crops.

Disease	Application Method	Rate	Application Program
Crown rot & Asparagus spear slime (Phytophthora spp)	Foliar	1/3 fl. oz. per gallon of water	Apply to ferns that have 2 to 3 inches of new growth. Do not apply to ferns that are starting to die down (senesce). Established plantings, start applications when conditions are favorable to disease (cool wet conditions). Ensure thorough coverage.

* Not for use in California.

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AVOCADOS

Use AGRI-FOS® Systemic Fungicide for effective control of root rot, trunk cankers and downy mildew disease in Avocado.

Disease	Application Method	Rate	Application Program
Root rot (Phytophthora cinnamomi)	Tree Injection	Skeletal trees 1st year: 1/4 fl. oz. undiluted product per yard of canopy diameter. Other situations: 1/8 fl. oz. diluted with 1/2 fl. oz. of water per yard of canopy diameter.	Inject trees at spring flush maturity. Repeat treatment in February or March. Drill holes 3/16 inch (5 mm) in diameter and 1 inch (25 mm) to 2 inches (50 mm) deep with slight downward angle in trunk. Place syringes in the main trunk of the tree and space evenly around the circumference of the trunk. Suitable for use with Chemject tree injectors, Ag-murf gun, or hydralic tree injection. Do not prune back trees before injection process as burning of new growth may occur. Do not inject trees in winter months. Do not cut the canopy of injected trees. Do not add any material, other than water, to AGRI-FOS® Systemic Fungicide by trunk injection. Do not inject more liquid in a lesser number of syringes than directed.
	Foliar spray	1/3 fl. oz. per gal. of water	Spray to runoff at 2 - 2½ gallons of spray solution per adult tree. Start applications in spring, up to 4 applications a year at two-month intervals. Ensure thorough coverage.
Canker (Phytophthora citricola)	Trunk spray	8 - 16 fl. oz. per gal. of water	Apply to trunk lesions using sufficient spray volume to completely wet the trunk and lesions. If lesions absent, apply to trunk from soil level to two feet up trunk. If lesions present, use higher rate.
Downy mildew	Foliar spray	3/4 tsp. per gal. of water	Spray to run-off as required for disease control.

BERRIES*

Use AGRI-FOS® Systemic Fungicide for effective control of root rot in bush and cane berries such as, but not limited to, blueberries, blackberries, loganberries, and raspberries (red, black, hybrids/cultivars).

Disease	Application Method	Rate	Application Program
Root rot (Phytophthora spp)	Foliar spray	3 tsp. per gal. of water. Ensure foliage is completely wet.	New plantings: start application when new growth is 2 to 3 inches long. Established plantings: start applications when cool wet conditions occur which favor disease. West of Rocky Mountains: Autumn applications, apply when conditions favor disease, repeat in 4 weeks. Spring applications, first application after bud break and repeat in 4 weeks. East of Rocky Mountains: First application spring post bud break (2 to 3 inches new growth) and repeat at 50 to 60 day intervals. Do not exceed 4 applications per season. For blueberries - First application in spring at pink bud and then on a regular schedule of application at two to three intervals.

* Not for use in California.

BRASSICAS

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew in brassicas such as, but not limited to, broccoli, Brussels sprouts, cabbage, cauliflower, cavalo broccolo, collards, Chinese cabbage, Chinese mustard cabbage, kale, kohlrabi, mizuna, mustard greens, mustard spinach and rape greens.

Disease	Application Method	Rate	Application Program
Downy mildew (Peronospora parasitica)	Foliar spray	2 tsp. to 2 oz. per gal. of water California: 1/3 to 1/2 fl. oz. per gal. of water	1 to 3 week intervals between applications when conditions favor disease development (cool, moist weather). Use higher rates and shorter intervals when disease pressure increases.

CITRUS — Mature Trees

Use AGRI-FOS® Systemic Fungicide for effective control of root rot and collar rot diseases in citrus.

Disease	Application Method	Rate	Application Program
Brown rot and foot rot Phytophthora spp	Foliar spray	1 tsp. per gal. of water	When conditions favor disease, spray trees to run-off. Ensure even coverage. Do not apply at high temperatures (above 95°F) particularly if humidity is low or to moisture-stressed trees.
Root rot and collar rot (Phytophthora spp nicotianae and Phytophthora citrophthora)	Trunk spray	8 to 16 fl. oz. per gal. of water	Spray trunk lesions with enough spray volume to ensure lesions are completely wet. When disease levels are high, use higher rate.

COCONUTS

Use AGRI-FOS® Systemic Fungicide for effective control of bud rot and nut fall in coconuts.

Disease	Application Method	Rate	Application Program
Bud rot - Nut fall (Phytophthora palmivora)	Injection	1/3 to 1 fl. oz. per tree	Dilute AGRI-FOS® Systemic Fungicide with water to give final injection volume of 1 fl. oz. to 2 fl. oz. of water and AGRI-FOS®. Inject into the trunk or root system.

CUCURBITS

Use AGRI-FOS® Systemic Fungicide for effective control of sudden wilt, gummy stem blight, and downy mildew diseases in cucurbits such as, but not limited to, cucumber, Chinese waxgourd, citron melon, gherkin rock melon, honeydew melon, pumpkin, zucchini, watermelon and squash (summer and winter), momordica spp balsam apple, balsam pear, bitter melon, and Chinese cucumber.

Disease	Application Method	Rate	Application Program
Sudden wilt - Root and fruit rot (Phytophthora spp)	Foliar spray	Apply 1 fl. oz. per gal. of water	Entire spray coverage of plant is required. Do not exceed a total of 6 applications per season.
Gummy stem blight (Mycosphaerella melonis)			Apply when disease is evident. Continue applications at 21 day intervals until cure is apparent. Do not exceed a total of 6 applications per season.
Downy mildew (Pseudoperoniospora cubensis)			Apply within 7 to 10 days of infection. Repeat as necessary. Do not exceed a total of 6 applications per season.

FRUITING VEGETABLES*

Use AGRI-FOS® Systemic Fungicide for effective control of damping-off, root rot, and gummy stem blight diseases in eggplant, tomatoes, tomatillos, and peppers such as, but not limited to, bell, chili, cooking, pimento, and sweet.

Disease	Application Method	Rate	Application Program
Eggplant: Pythium and Phytophthora spp, and Gummy stem blight (Mycophaerella melonis)	Foliar spray	Apply 1 fl. oz. per gal. of water	Entire spray coverage of plant is required. Do not exceed a total of 6 applications per season. Apply when disease is evident. Continue applications at 21 day intervals until cure is apparent. Do not exceed a total of 6 applications per season.
Peppers: Late blight and root rot (Phytophthora infestans and Phytophthora spp)		2 tsp. to 2 oz. per gal. of water	First application at transplant or when direct seeded crops are at 2-4 true leaf, then at one to two week intervals as required to control disease. In high disease situations use higher rates and shorter spray intervals.
Tomatoes/Tomatillos: Late blight and root rot (Phytophthora infestans and Phytophthora spp)		2 tsp. to 2 oz. per gal. of water California: 3 tsp. per gal. of water	First application at transplant or when direct seeded crops are at 2-4 true leaf, then at one to two week intervals as required to control disease. In high disease situations use higher rates and shorter spray intervals.

* Except for tomatoes and tomatillos, not for use in California.

GRAPES

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew diseases in grapes.

Disease	Application Method	Rate	Application Program
Downy mildew (Plasmopara viticola)	Foliar spray	1/2 fl. oz. per gal. of water	It is essential that the rate of AGRI-FOS® Systemic Fungicide be adjusted to the vine-row volume, i.e., the volume of vine foliage per acre. Spray timing is critical Apply AGRI-FOS® Systemic Fungicide at times of high disease risk, especially between the time that conidtions are conducive to downy mildew infection and the appearance of oil spots. Ensure spray coverage is adequate and that the appropriate rate of AGRI-FOS® Systemic Fungicide is applied to match vine growth, particularly from mid-season onwards, and especially where grapes are grown on root stock.

HOPS*

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew in hops.

Disease	Application Method	Rate	Application Program
Downy mildew	Foliar spray by ground equipment only	2½ tsp. per gal. of water	When conditions favor disease, apply when: A. Shoots are 1/2 to 1 foot long. B. Post-training when vines are 6 feet high. C. 21 days post-application (B) D. During bloom.

* Not for use in California.

LEAFY VEGETABLES*

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew in leafy vegetables such as, but not limited to, amaranth, arugula, cardoon, celery, chervil, corn salad, endive, fennel, lettuce, parsley, radicchio, rhubarb, spinach, and Swiss chard. Excludes Brassica vegetables.

Disease	Application Method	Rate	Application Program
Downy mildew (Bremia lactucae)	Foliar spray	1-2/3 fl. oz. per gal. of water	Ensure spray coverage is adequate to wet the whole plant. During warm, wet conditions repeat application at 7 to 10 day intervals, if needed.

* Not for use in California.

LEGUMES*

Use AGRI-FOS® Systemic Fungicide for effective control of damping-off and root rot diseases in legumes (succulent and dried) such as, but not limited to, green beans, soybeans, wax beans, field beans, navy beans, lima beans, fava beans, kidney beans, pinto beans, mung beans, broad beans, lentils, chickpeas, English peas, snow peas, sugar snap peas, black-eyed peas, cow peas, and pigeon peas.

Disease	Application Method	Rate	Application Program
Phytophthora and Pythium spp	Foliar spray	2 tsp. to 2 fl. oz. per gal. of water	Apply at 14 day intervals after plant emergence, as needed. Assure good coverage.

* Not for use in California.

MANGOS

Use AGRI-FOS® Systemic Fungicide for effective control of anthracnose in mangos.

Disease	Application Method	Rate	Application Program
Anthracnose (Colletotrichum gloeosporoides)	Foliar spray	2 tsp. per gal. of water	Spray tree every 14 days during blossom period, then monthly until harvest. Spray to the point of runoff.

NONGRASS ANIMAL FEED*

Use AGRI-FOS® Systemic Fungicide for effective control of damping-off and root rot diseases in forage crops such as, but not limited to, alfalfa, clover, and vetch.

Disease	Application Method	Rate	Application Program
Phytophthora and Pythium spp	Foliar spray	2 tsp. to 2 oz. per gal. of water	Apply at 14 day intervals after plant emergence, as needed. Assure good coverage.

* Not for use in California.

OKRA*

Use AGRI-FOS® Systemic Fungicide for effective control of damping-off and root rot diseases in okra.

Disease	Application Method	Rate	Application Program
Phytophthora and Pythium spp	Foliar spray	2 tsp. to 2 oz. per gal. of water	Apply at 14 day intervals after plant emergence, as needed. Assure good coverage.

* Not for use in California.

ONIONS

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew disease in onions, garlic, shallots, and leeks. Use as a preventative control program for best results.

Disease	Application Method	Rate	Application Program
Downy mildew (Peronospora destructor)	Foliar spray	4 tsp. per gal. of water	As a regular preventative control program or when disease first appears.

PEANUTS*

Use AGRI-FOS® Systemic Fungicide for effective control of damping-off and root rot disease in peanuts.

Disease	Application Method	Rate	Application Program
Phytophthora and Pythium spp	Foliar spray	2 tsp.to 2 oz. per gal. of water	Apply at 14 day intervals, as necessary. Ensure thorough coverage.

* Not for use in California.

PINEAPPLES

Use AGRI-FOS® Systemic Fungicide for effective control of Phytophthora root and heart rot diseases in pineapples.

Disease	Application Method	Rate	Application Program
Phytophthora root and heart rot (Phytophthora cinnamomi and parasitica spp)	Foliar spray	1-2/3 to 3-1/3 fl. oz. per gal. of water	Apply to tops, 14 days prior to harvest of planting material.
	Pre-plant dip	2 tsp. per gal. of water	Established plantings: when conditions favor disease. Apply at 90 day intervals.
	Foliar spray	2/3 fl. oz. per gal. of water	Ensure thorough coverage of plants.

ROOT AND TUBER VEGETABLES*

Use AGRI-FOS® Systemic Fungicide for effective control of foliar and root rot in ginseng, damping-off and root rot diseases in carrots, and late blight disease and storage diseases such as pink rot and pythium leak in potatoes, sweet potatoes, and yams.

Disease	Application Method	Rate	Application Program
Ginseng: Foliar and root rot (Phytophthora cactorum)	Foliar spray	4½ tsp. per gal. of water	In cool wet conditions that favor Phytophthora, apply at 7 day intervals. Do not exceed a total of 8 applications per season.
Carrots: Phytophthora and Pythium spp	Foliar spray	2 tsp. to 2 oz. per gal. of water	Apply at 14 day intervals after plant emergence, as needed. Assure good coverage.
Potatoes, Sweet Potatoes, Yams: Pink rot and Pythium leak (Phytophthora erythroseptica and Pythium spp)	In-furrow spray	6½ to 16 fl. oz. per gal. of water	Apply in a band spray directly over top of potato seed just before row is closed.
Potatoes, Sweet Potatoes, Yams: Late blight, Pink rot and Pythium leak (Phytophthora infestans, Phytophthora erythroseptica and Pythium spp)	Foliar spray	2/3 to 3 tsp. per gal. of water	Apply at 5 to 14 day intervals subject to disease incidence.

* Except for potatoes, sweet potatoes, and yams, not for use in California.

STONE FRUIT*

Use AGRI-FOS® Systemic Fungicide for effective control of root, collar rot and almond pruning wound canker disease in stone fruit such as, but not limited to, sweet and tart cherries, peaches, plums, and fresh prunes.

Disease	Application Method	Rate	Application Program
Root and collar rot (Phytophthora spp)	Foliar spray	1/3 fl. oz. per gal. of water	Three treatments are required: 1. Spring. 2. Mid summer. 3. Fall, post harvest.
Almond pruning-wound cankers (Phytophthora syringae)	Paint or spray	1/3 to 3/4 fl. oz. per gal. of water	Apply to pruning wound and surrounding area, ensure area is thoroughly wet. In high disease situations use higher rate.

* Not for use in California.

STRAWBERRIES

Use AGRI-FOS® Systemic Fungicide for effective control of leather rot, red stele and Phytophthora disease in strawberries.

Disease	Application Method	Rate	Application Program
Red stele (Phytophthora fragariae)	Pre-planting dip	1/3 fl. oz. per gal. of water	Dip planting material in this solution for 30 minutes, then plant within one day. Use program for annual and perennial varieties.
	Foliar spray	2 to 3 tsp. per gal. of water	Annual crops, first treatment 14 to 21 days post planting, repeat at 1-2 month intervals when disease is evident. Perennial crops, first treatment during spring growth flush, repeat at 1-2 month intervals when disease is evident. For susceptible varieties use higher rates and shorter spray intervals.
Leather rot (Phytophothora cactorum)	Foliar spray	2 to 3 tsp. per gal. of water	Apply at 10% bloom and early fruit set, then at one to two week intervals as required for disease control. In high disease situations use higher rates and shorter spray intervals.

TREE NUTS*

Use AGRI-FOS® Systemic Fungicide for effective control of root and collar rot, and almond pruning-wound canker disease in tree nuts such as, but not limited to, almonds, beech nuts, Brazil nuts, butternuts, cashews, chestnuts, chinquapin, hazelnuts, hickory nuts, macadamia nuts, pecans, and walnuts.

Disease	Application Method	Rate	Application Program
Other than macadamia nuts: Root and collar rot (Phytophthora spp)	Foliar	2 tsp. per gal. of water	Three treatments required: 1. Spring. 2. Mid summer. 3. Fall, post harvest.
Other than macadamia nuts: Almond pruning-wound canker (Phytophthora syringae)	Paint or spray	4½ tsp. per gal. of water	Apply to pruning-wound and surrounding area, ensure area is thoroughly wet.
Macadamia nuts: Raceme blight (Phytophthora spp)	Foliar spray	3 tsp. per gal. of water	Apply when disease is first seen and reapply at 3 week intervals. Spray to the point of run-off.

* Not for use in California.

LANDSCAPE APPLICATIONS*

Use AGRI-FOS® Systemic Fungicide for effective control of Phytophthora and Pythium diseases associated with Sudden Oak Death, Beech Decline, and general tree decline syndromes. Apply AGRI-FOS® Systemic Fungicide to plants such as, but not limited to, Beech, Cedar, Chestnut, Crab Apple, Dogwood, Elm, Fir, Juniper, Linden, Monterey Pine, Oaks (Coastal, Live, Shreve, Black, Canyon), Ornamental Pear, Sweet Birch, Sweet Gum, White Pine, White Cedar, and Willow.

Make applications before disease development and in conjunction with good cultural management practices. Use higher rate of application when disease pressure is severe. Do not exceed indicated application rates or apply more frequently than stated on label or plant injury may occur. Do not apply to plants that are heat or moisture stressed. Do not apply to plants that are in a state of dormancy. Do not exceed indicated spray intervals or label rates in order to avoid plant injury.

Landscape Applications* (Continued)

Disease	Application Method	Rate	Application Program
Phytophthora and Pythium spp., and Phytophthora ramorum	Injection	11 fl. oz. per 21 fl. oz. of water or 1/2 tsp. per tsp. of water	Drill holes 3/16 inch (5 mm) in diameter into live sapwood (depth dependent upon age of tree) with downward angle into trunk uniformly around the tree circumference, using a slow drill. Do not inject into areas of obvious decay, canker or mechanical injury that appear on the tree trunk. Calculate the amount of product required by measuring the trees by one of the following 3 methods, and use the highest calculated number of injections. 1) 1 Injection per square yard of canopy; 2) 1 injection per yard of diameter of canopy measured at the dripline; 3) 1 injection per 6 inches of trunk circumference measured 4 feet above soil level. Make injections with applicators that maintain positive pressure differential such as ChemJet®, Sidewinder®, Ag-murph Gun®, Marley® Injector, or hydraulic applicator type equipment that forces solution into the sapwood of the tree.
	Basal bark spray	31.2 fl. oz. + 31.2 fl. oz. of water + 1.6 fl. oz. Pentra-Bark™ Bark Penetrating Surfactant	Apply uniformly to 6 - 9 feet of trunk circumference. Spray from top down to ground level from either first branch or from as high as possible without exposing applicator to drift. Spray to just prior to runoff. Can be used as a preventative or curative application. Various types of application equipment can be used such as hydraulic sprayers, handheld pump-type sprayers, backpack sprayers, hose-end applicators with backflow prevention devices, and other similar application devices.

*Except for Oaks (Coastal, Live, Shreve, Black, Canyon) and Tan Oaks, not for use in California.

ORNAMENTAL APPLICATIONS

Use AGRI-FOS® Systemic Fungicide for effective control of Bacterial blight, Downy mildew, Phytophthora spp and Pythium spp diseases, and Sudden Oak Death of Ornamentals in landscapes. Apply AGRI-FOS® Systemic Fungicide to plants such as, but not limited to, Aglaonema, Aphelandra, Arborvitae, Azaleas, Bougainvillea, Boxwood, Cattelya skinneri, Ceanothus, Cotoneaster, Cissus, Diffenbachia, English ivy, Eucalyptus, Ficus, Hibiscus, Japanese andromeda, Japanese Holly, Leather leaf Fern, Peperomia, Photinia, Pittosporum, Philodendron, Pieris, Pothos, Rhododendron, Roses (container, landscape, mini varieties), Schefflera, Sedum, Sempervivum, Syngonium, Spathiphyllum, Taxus media, and Zygocactus.

Make applications before disease development and in conjunction with good cultural management practices. Use higher rate of applicaiton when disease pressure is severe. Do not exceed indicated application rates or apply more frequently than stated on label in order to avoid plant injury. Do not apply to plants that are heat or moisture stressed. Do not apply to plants that are in a state of dormancy.

Disease	Application Method	Rate	Application Program
Bacterial blight (Xanthomonas campestris) potothovars: dieffenbachiae, fici hederae and syngonli	Foliar spray	2-4 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 7 to 14 days. Repeat as required.
Downy mildew		2½-5 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
Phytophthora spp and Pythium spp		2-4 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
	Soil drench	1/8 tsp. per gal. of water	Apply each 25 gallons of solution to an area of 100 square feet. Follow application with irrigation. Repeat as required. Limit of one application per month.
	Soil incorporation	1-2 pints per cubic yard of soil	Just prior to potting, mix 1 to 2 pts. of AGRI-FOS® Systemic Fungicide into each cubic yard of growing media. If disease pressure is high, apply foliar spray or soil drench.
	Bare rooted dipping of transplants	2 tsp. per gal. of water	Immediately before transplanting, dip transplants for two minutes, keep roots submerged, ensure root mass is thoroughly wet.

BEDDING PLANTS

Use AGRI-FOS® Systemic Fungicide for effective control of downy mildew, Phytophthora spp and Pythium spp diseases of Bedding Plants. Apply AGRI-FOS® Systemic Fungicide to plants such as, but not limited to, Ageratum, Algerian Ivy, Anthurium, Artemesia, Aster, Begonia, Baby's Breath, Caladium, Carnation, Chrysanthemum, Columbine, Coleus, Daisy, Delphinium, Easter Lily, English Ivy, Foxglove, Gaillardia, Geranium, Gloxinia, Impatiens, Marigold, Petunia, Pansy, Phlox, Pinks, Poinsettia, Primrose, Prostrate Rosemary, Salvia, Snapdragon, Vinca, Verbena, and Zinnia.

Make applications before disease development and in conjunction with good cultural management practices. Use higher rate of application when disease pressure is severe. Do not exceed indicated application rates or apply more frequently than stated on label in order to avoid plant injury. Do not apply to plants that are heat or moisture stressed.

Disease	Application Method	Rate	Application Program
Downy mildew	Foliar spray	½ - 1 1/8 fl. oz. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
Phytophthora spp and Pythium spp	Foliar spray	2 to 4 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required. Note: Do not apply more than 500 gallons of spray solution per acre (11.5 gals. per 1,000 sq. ft.).
	Soil drench	1/8 tsp. per gal. of water	Apply each gallon of solution to an area of 4 square feet. Follow application with irrigation. Repeat as required. Limit of one application per month.

CONIFERS*

Apply AGRI-FOS® Systemic Fungicide in conjunction with good cultural management practices for effective control of root rot (Phytophthora spp) in Conifers including, but not limited to, Pines, Spruce and Douglas Fir. Use higher rate of application when disease pressure is severe. Do not exceed indicated application rates or apply more frequently than stated on label in order to avoid plant injury. Do not apply to Conifers that are moisture or heat stressed.

Disease	Application Method	Rate	Application Program
Phytophthora spp	Foliar spray	2 to 4 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
	Soil drench	2 to 4 tsp. per gal. of water	Apply spray to thoroughly wet all foliage. Application intervals: 14 to 21 days. Repeat as required.
	Bare root dipping at transplanting	2 tsp. per gal. of water	Immediately before transplanting, dip transplants for two minutes; keep roots submerged and ensure root mass is thoroughly wet.

* Not for use in California.

TURF

Use AGRI-FOS® Systemic Fungicide for the effective control of Pythium and damping-off diseases of turf grasses. When conditions favor disease, begin preventative applications and repeat at indicated intervals. Use higher rate of application when disease pressure is severe.

Do not graze livestock animals on treated areas of turf. Do not feed treated turf clippings to poultry or livestock.

Disease	Application Method	Rate	Application Program
Pythium	Foliar spray	5 to 10 fl. oz. per 1,000 sq. ft.	Apply indicated quantity of product in 1 to 5 gallons of water per 1,000 sq. ft. Ensure foliage is thoroughly wet. Application intervals: 14-21 days. Repeat as required. Do not irrigate or mow treated areas until spray has completely dried.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials.

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 or 1-800-CLEANUP (1-800-253-2687) for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE TO BUYER

To the extent permitted by law, all conditions and warranties and statutory or other rights of action which buyer or any other user may have against Lawn and Garden Products, Inc. are hereby excluded. Lawn and Garden Products, Inc. hereby gives notice to buyer and other users that it will not accept responsibility for any indirect or consequential loss arising from reliance on product information provided by Lawn and Garden Products, Inc. or on its behalf unless it is established that such information or advice was provided negligently and that the product has been used strictly as directed. Lawn and Garden Products, Inc.'s liability shall in all circumstances be limited to replacement of product or a refund of the purchase price thereof.

1004(01)

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Product
AGRI-FOS® SYSTEMIC FUNGICIDE
EPA Reg. No. 71962-1-54705
Common Name: Liquid systemic fungicide.
Chemical Description: Mono- and di-potassium salts of Phosphorous Acid.
TSCA/CAS No.: This product is a mixture — there is no specific CAS number.

Manufactured For
Lawn & Garden Products, Inc.
P. O. Box 35000
Fresno, CA 93745-5000

Emergency Phone Numbers
Emergency Telephone: DAYS: (559) 499-2100 EVES.: (559) 994-9144
CHEMTREC (24-Hour Emergency Number): (800) 424-9300
EPA National Response Center: (800) 424-8802

SECTION 2. HAZARDOUS INGREDIENTS

CHEMICAL	CAS NO.	%	TLV OR PEL	RQ (lbs)

None.

SECTION 3. EMERGENCY/HAZARDS OVERVIEW

Blue liquid with slight to no odor. Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid strong oxidizing agents and strong bases. Corrosive to most metals. Not DOT regulated.

HEALTH: 2 REACTIVITY: 0 FLAMMABILITY: 0 ENVIRONMENT: 0
(0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme)

SECTION 4. FIRST AID

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.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: 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 a poison control center or doctor. Never give anything by mouth to an unconscious person.

Inhalation: 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.

SECTION 5. FIRE AND EXPLOSION HAZARDS

Flash Point:	Not applicable.
Test Method:	Not available.
LEL Flammable Limits:	Not available.
UEL Flammable Limits:	Not available.
Autoignition Temperature:	Not available.
Flammability Classification:	Not applicable.
Known Hazardous Products of Combustion:	None.
Properties that Initiate/Contribute to Intensity of Fire:	None.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	This is not a flammable material. Some gases such as phosphorus oxides may be released.
Extinguishing Media:	Carbon dioxide, dry chemical, foam, water spray.
Special Firefighting Procedures:	Use full-faced self-contained breathing apparatus along with full protective gear.

SECTION 6. SPILLS AND LEAKS

Containment:	Prevent product spillage from entering drinking water supplies or streams.
Clean Up:	Collect liquid or absorb onto absorbent material and package for disposal.
Evacuation:	Not necessary.

SECTION 7. STORAGE AND HANDLING

Storage:	Store in well sealed container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not store near heat or flame. Do not store near combustible materials, herbicides, fungicides, and food or feeds. Do not stack pallets more than two (2) high.
Transfer Equipment:	Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.
Work/Hygienic Practices:	Keep out of reach of children. May be harmful if swallowed, inhaled or absorbed through skin. Avoid breathing vapors or spray mist. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse. Do not allow children or pets to contact treated area until sprays have dried.

SECTION 8. PERSONAL PROTECTIVE EQUIPMENT

Eyes:	Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.
Skin:	Long-sleeved shirt, long pants, shoes plus socks and household latex or rubber gloves.
Respiratory:	Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).
Ventilation:	Recommended but no TLV established.

SECTION 9. PHYSICAL AND CHEMICAL DATA

Appearance:	Blue liquid.
Odor:	Slight to none.
pH:	5.5 @ 20ºC
Vapor Pressure:	Not available.
Vapor Density (Air = 1):	Not available.
Boiling Point:	>105ºC (221ºF)
Freezing Point:	Not available.
Water Solubility:	Miscible.
Density:	11.36 lbs./gal.
Evaporation Rate:	Not available.
Viscosity:	2.273 (cSt) @ 20ºC.
% Volatile:	Not available.
Octanol/Water Partition Coefficient:	Not available.
Saturated Vapor Concentration:	Not available.

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable.
Conditions To Avoid:	Avoid strong oxidizers and bases. Corrosive to most metals.
Incompatibility:	Not compatible with strong oxidizers, bases and most metals.
Hazardous Decomposition Products:	None known.
Hazardous Polymerization:	Will not occur.

SECTION 11. POTENTIAL HEALTH EFFECTS

Acute Effects:

Eyes:	Mild irritant to eyes.
Skin:	Mildly irritating to skin.
Ingestion:	Ingestion may cause diarrhea, nausea, vomiting and cramps.
Inhalation:	May be slightly irritating.
Subchronic Effects:	None known.
Chronic Effects:	Not established.

SECTION 12. ECOLOGICAL INFORMATION

Algal/Lemna Growth Inhibition:	Not known.
Toxicity to Fish and Invertebrates:	> 100 mg/L.
Toxicity to Plants:	Not known.
Toxicity in Birds:	Not known.

SECTION 13. DISPOSAL

Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. If container is empty: Do not reuse this container. Place in trash or offer for recycling. If container is partially filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14. TRANSPORTATION

D.O.T.:	Not D.O.T. Regulated.
Other Shipping Description:	Insecticides or Fungicides, Liquid. NMFC Item 102120, LTL Class 60

SECTION 15. REGULATORY INFORMATION

CERCLA: None.
SARA TITLE III, Section 313 Toxic Chemicals: None.
Proposition 65: None.

SECTION 16. OTHER

All information appearing in this document was based on data provided by third party sources and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act. The information is believed to be accurate as of the preparation date, but is not warranted as being the final authority in the use of this product. This information does not purport to be legal or medical advice.

MATERIAL SAFETY DATA SHEET

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: **ARBOTECT 20-S** Product No.: A10345A

EPA Signal Word: Caution

Active Ingredient(%): Thiabendazole (26.6%) CAS No.: 148-79-8

Chemical Name: 1H-Benzimidazole, 2-(4-thiazolyl)-

Chemical Class: Benzimidazole Fungicide

EPA Registration Number(s): 100-892 **Section(s) Revised: 14**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Hypophosphorus Acid (50% Solution)	Not Established	Not Established	Not Established	No
Thiabendazole (26.6%)	Not Established	Not Established	10 mg/m³ TWA ***	No

*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
Syngenta Hazard Category: B, S

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Irritating to eyes.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Yellow orange liquid

Odor: Weak, like hydrogen sulfide

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or

doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method):	Not Available	
Flammable Limits (% in Air):	Lower: % Not Applicable	Upper: % Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Not Applicable	

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow orange liquid
Odor:	Weak, like hydrogen sulfide
Melting Point:	Not Applicable
Boiling Point:	212°F
Specific Gravity/Density:	1.10@ 77°F (25°C)
pH:	2.7(1% suspension in water)

Solubility in H2O

Thiabendazole: 30mg/l (pH 7, pH 10) @ 68°F in water

Vapor Pressure

Thiabendazole: 4.0 x 10(-9) mmHg @ 77°F

10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	None known.
Materials to Avoid:	Oxidizing agents (e.g., chlorates, nitrates)
Hazardous Decomposition Products:	Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	Practically Non-Toxic	
	Oral (LD50 Rat) :	>5,000 mg/kg body weight
Dermal:	Practically Non-Toxic	
	Dermal (LD50 Rat) :	>5,050 mg/kg body weight
Inhalation:	Not Available	
	Inhalation (LC50 Rat) :	Not Available
Eye Contact:	Non-Irritating (Rabbit)	
Skin Contact:	Practically Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Reproductive/Developmental Effects

Thiabendazole: Evidence of developmental effects (skeletal defects, cleft palate) observed in animal studies.

Chronic/Subchronic Toxicity Studies

Thiabendazole: Increased incidence of anemia and changes in the gall bladder, kidney, liver, spleen and thyroid gland in rat and dog tests.

No adverse health effects are expected in humans at airborne levels below the occupational exposure limit.

Carcinogenicity

Thiabendazole: None observed.

Other Toxicity Information

None

Toxicity of Other Components

Hypophosphorus Acid (50% Solution)

Test results reported in Section 11 for the final product take into account any acute hazards related to the hypophosphorus acid in the formulation.

Target Organs

Active Ingredients

Thiabendazole: Thyroid, liver, spleen, kidney, gall bladder, blood

Inert Ingredients

Hypophosphorus Acid (50% Solution): Not Applicable

12. ECOLOGICAL INFORMATION

Summary of Effects

Thiabendazole

Very toxic to aquatic organisms. The aquatic toxicity is not increased significantly by chronic exposure. Does not bioaccumulate in fish and is rapidly metabolized.

Eco-Acute Toxicity

Thiabendazole
Invertebrates (Water Flea) LC50/EC50 0.81 ppm
Fish (Trout) LC50/EC50 0.55 ppm
Fish (Bluegill) LC50/EC50 19 ppm
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,620 ppm

Eco-Chronic Toxicity

Thiabendazole: Not Available

Environmental Fate

Thiabendazole:

The information presented here is for the active ingredient, thiabendazole.
Low bioaccumulation potential. Stable in soil and water. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Corrosive

Listed Waste: D002

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA
Not regulated.

Air Transport - NAFTA
Not regulated.

B/L Freight Classification

Fungicides, NOIBN

Comments

Water Transport - International
Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (Thiabendazole), Marine Pollutant
Hazard Class or Division: Class 9
Identification Number: UN 3082
Packing Group: PG III
IMDG EMS # : F-A, S-F

Air Transport - International
Not regulated.

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Thiabendazole (26.6%) (CAS No. 148-79-8)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Corrosive D002

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	1	Health:	1
Flammability:	1	Flammability:	1
Instability:	0	Reactivity:	0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 6/5/1989
Revision Date: 10/2/2006 Replaces: 10/28/2004

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP# : Not Applicable

End of MSDS

PULL HERE TO OPEN

Arbotect® 20-S

Fungicide

For Dutch Elm Disease and Sycamore Anthracnose

Active Ingredient:	
Thiabendazole Hypophosphite (CAS No. 28558-32-9)	26.6%
(equivalent to 20% Thiabendazole)	
Other Ingredients:	73.4%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-892

EPA Est. 39578-TX-1

Product of India
Formulated in the USA

SCP 892A-L1L 0909
304756

1 gallon
Net Contents

syngenta®

FIRST AID	
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
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 on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for 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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	

HOT LINE NUMBER

For 24 Hour Medical Emergency Assistance (Human or Animal) or
Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),
Call
1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. May irritate skin. Avoid contact with skin or eyes.

Personal Protective Equipment (PPE)

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticides get inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

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 by cleaning of equipment or disposal of wastes.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential, or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

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 (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.

The restricted entry interval (REI) is 0 hours.

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 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 greenhouses.

The restricted entry interval (REI) is 0 hours.

GENERAL INFORMATION

Arbotect 20-S is a systemic fungicide for use as a flare root injection for prevention of Dutch elm disease (*Ophiostoma ulmi* and *O. novo-ulmi*) on elms (*Ulmus* spp.) and treatment of sycamore anthracnose (*Apiognomonia platani*) on sycamores and London plane trees (*Platanus* spp.). It is recommended that Arbotect 20-S be administered by trained arborists or others trained in injection techniques and in the identification of diseases.

Correct Location for Injector Placement

The flare root area is the transitional zone between the trunk and the root system. Uptake and distribution of Arbotect 20-S is more effective when injections are made into the flare roots. In addition, wounds created in the flare root area close more rapidly in comparison to wounds above the flare root area.

Tree Preparation

1. Heavy, thick, or loose outer bark may be carefully shaved to form a smoother injection point and to ensure the operator that the drill hole penetrates through the bark to the xylem.
2. If the flare roots are not clearly exposed, carefully remove enough soil from the base of the tree to uncover the top of the flare roots. Brush away loose soil.
3. Drill holes through the bark, into the sapwood using a clean, sharp, drill bit (high-helix or brad-point bits are recommended). For best results, change drill bits every 5-10 trees. Drill hole diameter should be adequate to allow insertion of injection tees and formation of an airtight contact between active xylem and the delivery point of the injection tees. Generally, the drill hole should not exceed 1/2 inch in diameter.

   Drill hole depth should be adequate to deliver the product into active xylem tissue. Generally, one inch depth is appropriate. Drill perpendicular to the surface of the root flare.

   Place injectors 3-6 inches apart around the base of the tree. Do not drill in the valleys between the flare roots or into cankered areas. Drill above these areas into the trunk, then continue into sound sapwood on the flares.
4. Insert into the drilled holes the injection ports (“tees”), which are connected to the plastic tubing. Insert the tees by hand and lightly tap with a small hammer to set in the hole. Do not push the tees past the current year’s xylem.
5. Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. For hard water or water with high pH, use a deionizer tank or pH stabilizer (for example, muriatic acid) to keep Arbotect 20-S in solution.

Tree Measurement

Measure the diameter of the tree using a tree diameter-tape (D-tape) at 4 1/2 feet above the ground. This is the diameter at breast height (DBH). If only a regular tape is available, measure the tree circumference and divide that number by 3.14 to obtain the diameter.

Injection

For best results, use a pressurized system that holds constant pressure at 15-20 psi. Pull out two tees, on opposite sides of the tee, and bleed the air out of the harness. When all air bubbles have been removed, insert the two tees, adjust the pressure to 15-20 psi, and check for leaks. Do not add the Arbotect 20-S until the system is running.

After the injection is complete, remove injection tees and leave drill holes unplugged. A water flush to cleanse the hole may assist with wound closure. Soil should be replaced around the root flares. It is not necessary to treat the drill holes with wound paint or other sealing compounds.

The injection system described is meant as an example; please refer to manufacturer's instructions when using other types of tree injection systems.

APPLICATION PROCEDURES

Elm Trees – 1-Year Growing Season Treatment – Aids in the Control of Dutch Elm Disease

Preventive Treatment – For each 5 inches of trunk diameter, inject 1 fl. oz. of Arbotect 20-S in 40 fl. oz. ($1\frac{1}{4}$ qts.) of water to 2 fl. oz. of Arbotect 20-S in 80 fl. oz. ($2\frac{1}{2}$ qts.) of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Preventive applications should be made when leaves approach full size, usually in late May or June.

Therapeutic Treatment – For each 5 inches of trunk diameter, inject 2 fl. oz. of Arbotect 20-S in 80 fl. oz. ($2\frac{1}{2}$ qts.) of water to 4 fl. oz. of Arbotect 20-S in 160 fl. oz. of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Therapeutic applications should be made as soon as the current year infections are seen, usually in late June through August.

For optimum disease control, preventive treatment is recommended. When a tree shows more than 5% crown symptoms, treatment may not be effective. Treatment should be used in conjunction with an insect control and sanitation program (pruning of diseased limbs) in order to obtain best results. Trees that are 5 inches or less in diameter at chest height should not be treated.

Place injection sites as near to ground level as possible at 3 to 10-inch intervals around the trunk with a maximum hole diameter of 1/2 inch using a minimum of 3 or 4 equally spaced injection points per tree.

Elm Trees – 3-Year Growing Season Treatment – For Preventive Treatment of Dutch Elm Disease

Inject 12 fl. oz. of Arbotect 20-S for each 5 inches of trunk diameter. Dilute each 2.0 fl. oz. of Arbotect 20-S with 1 gal. of water. Inject into any exposed root flares, below ground, once every three years. Place injection sites into root flares at 3-10 inch intervals around the tree with a maximum hole diameter of 1/4 inch. Where needed, the root flares will need to be exposed through soil excavation. Trees treated into trunk wood will not be as effectively protected. A typical tree will require 1.3 injection sites per diameter inch. For best results, injections should be made after the tree is fully leafed and the seeds have dropped, through late summer or early fall.

- Do not use this treatment if trees are less than 10 inches in diameter.
- If pressure injection is to be used, do not exceed 30 psi.
- Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. Pre-test your water source by mixing a small amount of Arbotect 20-S with water. If the solution turns white, use different water.

Retreatment

Arbotect 20-S will provide three growing seasons of protection in most situations. However, protection in the third year after treatment will be slightly less than the first two years. In high disease pressure situations and for trees over 30 inches in diameter, retreatment may need to be considered during the third growing season after the tree was initially treated.

Therapeutic Treatment of Elms

Before treating a diseased elm with Arbotect 20-S, it is important to first isolate the disease from the tree using tracing techniques or limb removal. Injecting an elm tree that has the Dutch elm disease fungus actively growing will result in the failure of the treatment.

Sycamore Trees and London Plane Trees – 3-Year Growing Season Treatment – Aids in the Control of Sycamore Anthracnose

For each 5 inches of trunk diameter, inject 8 fl. oz. of Arbotect 20-S. (One part Arbotect 20-S should be diluted with between 20 and 40 parts of water). For large trees over 30 inches in diameter, inject up to 12 fl. oz. of Arbotect 20-S per 5 inches of trunk diameter.

For best results, injections should be made after the tree is fully leafed (post infection) through late summer or early fall. Treatments will aid in the control of sycamore anthracnose for up to three growing seasons. Trees over 50 inches diameter may need two consecutive treatments one year apart to obtain the desired level of protection.

Place injection sites at 3-10 inch intervals around the root flares. Trees treated into trunk wood will not be as effectively protected. Use a maximum hole diameter of 1/4 inch using a minimum of 3 or 4 equally spaced injection points per tree. A typical tree will require 1.3 injection sites per diameter inch. It is important that injection sites be placed in root flares at or below ground level.

- Trees that are 5 inches or less in diameter at chest height should not be treated.
- If pressure injection is to be used, do not exceed 30 psi.
- Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form. Pre-test your water source by mixing a small amount of Arbotect 20-S with water. If the solution turns white, use different water.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

Pesticide Disposal

Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.

Container Handling

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, Inc.
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 892A-L1L 0909
304756

BAR CODE # IS
(01) 0 07 02941 81235
LAST DIGIT IS CHECK DIGIT
UCC/EAN 128

Arbotect® 20-S

Fungicide

For Dutch Elm Disease and Sycamore Anthracnose

Active Ingredient:

Thiabendazole Hypophosphite (CAS No. 28558-32-9)	26.6%
(equivalent to 20% Thiabendazole)	
Other Ingredients:	73.4%
Total:	100.0%

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-892
EPA Est. 39578-TX-1

Product of India
Formulated in the USA

Manufactured for:
Syngenta Crop Protection, Inc.
P. O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 892A-L1L 0909
304756

1 gallon
Net Contents

KEEP OUT OF REACH OF CHILDREN.

CAUTION

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. Harmful if inhaled. Avoid breathing spray mist. May irritate skin. Avoid contact with skin or eyes.

FIRST AID

If swallowed: Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

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 on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**.

Environmental Hazards: Do not apply r to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

Pesticide Disposal: Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

syngenta®

PULL HERE TO OPEN

Banner MAXX®

Fungicide

Broad spectrum and systemic disease control for turf and ornamentals

Active Ingredient:

Propiconazole: (CAS No. 60207-90-1)	14.3%
Other Ingredients:	85.7%
Total:	100.0%

Banner MAXX contains a nominal 1.3 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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 additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-741
EPA Est. 39578-TX-1
Product of Switzerland
Formulated in the USA

SCP 741B-L4F 0710
327432

syngenta®

1 pint Net Contents

FIRST AID	
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 or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for 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 do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

continued...

FIRST AID *(continued)*	
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN

If ingested, induce emesis or lavage stomach. Treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER

For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident),
Call
1-800-888-8372

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

When handlers use closed systems or enclosed cabs 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.

continued...

PRECAUTIONARY STATEMENTS *(continued)*

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

Physical and Chemical Hazards

Do not use or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, INC. or Seller. To the extent consistent with applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent consistent with applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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 (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 12 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
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®
- Shoes plus socks
- 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 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 greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

PRODUCT INFORMATION

Banner MAXX is a systemic fungicide for use on turfgrasses for the control of dollar spot (*Sclerotinia homoeocarpa*), brown patch (*Rhizoctonia solani*), anthracnose (*Colletotrichum graminicola*), red thread (*Laetisaria fuciformis*), pink patch (*Limonomyces roseipellis*), rust (*Puccinia graminis*), powdery mildew (*Erysiphe graminis*), stripe smut (*Ustilago striiformis* and *Urocystis agropyri*), summer patch (*Magnaporthe poae*), necrotic ring spot (*Leptosphaeria korrae*), spring dead spot (*Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis*), take-all patch (*Gaeumannomyces graminis*), leaf spot (*Bipolaris* spp., *Drechslera* spp.), gray leaf spot (*Pyricularia grisea*), pink snowmold (*Microdochium nivale*), fusarium patch (*Fusarium nivale*), gray snowmold (*Typhula* spp.), yellow patch (*Rhizoctonia cerealis*), and zoysia patch (*Rhizoctonia solani*).

Banner MAXX also controls numerous diseases on ornamentals and other landscape and nursery plantings. It controls powdery mildews, rusts, leaf spots, scabs, and blights. Refer to the appropriate section for specified diseases and plants.

- Do not apply more than 5.4 gal. of Banner MAXX/acre/calendar year.
- Do not apply this product through any type of irrigation system.
- Do not use Banner MAXX as a tree injection.
- Do not use Banner MAXX in greenhouses.

MIXING INSTRUCTIONS

Fill the spray tank 1/2-3/4 full with water. Add the proper amount of Banner MAXX and then add the rest of the water. Provide sufficient agitation during mixing and application to maintain a uniform emulsion.

If Banner MAXX is tank mixed with other products, use the following sequence:

1. Always check the compatibility of the tank mix using a jar test with proportionate amounts of Banner MAXX, other chemicals to be used, and the water, before mixing in the spray tank.
2. Provide sufficient jet or mechanical agitation during filling and application to keep the tank mix uniformly suspended.
3. Fill tank at least 1/2 full of clean water.

4. Add wettable powders to the tank first, allowing them to completely suspend in the tank before proceeding. This process can be hastened by premixing the product in water before adding to the tank.
5. Add flowables or suspensions next.
6. Add Banner MAXX next.
7. Add emulsifiable concentrates last.
8. Do not leave tank mix combinations in the spray tank for prolonged periods without agitation. Mix and apply them the same day.

Tank Mixes

For broader spectrum control, Banner MAXX can be tank mixed with other fungicides. For example, Subdue MAXX® may be tank mixed with Banner MAXX or used alone when conditions are favorable for Pythium blight. Banner MAXX is also compatible with numerous herbicides and insecticides. Check compatibility before tank mixing. Add Unite® (3 pt./100 gal.) to tank mixes which are incompatible. Follow the directions under **Mixing Instructions** for tank mixes. Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

TURFGRASS AND DICHONDRA DISEASE CONTROL

1. USE BANNER MAXX IN A PREVENTATIVE DISEASE CONTROL PROGRAM.

2. Apply in sufficient water to ensure thorough coverage.
3. Apply after mowing **OR** allow sprayed area to completely dry before mowing.
4. For control of foliar diseases, allow sprayed area to completely dry before irrigation.
5. For control of soil-borne diseases, Banner MAXX can be watered in after application.
6. Under conditions optimum for high disease pressure, use the higher rate and the shorter interval.
7. For optimum turf quality and disease control, use Banner MAXX in conjunction with turf management practices that promote good plant health and optimum disease control.
8. Evaluate spray additives prior to use. Label directions are based on data obtained with no additives.
9. Before use of any fungicide, proper diagnosis of the organism causing the disease is important. Use of diagnostic kits or other means of identification of the disease organism is essential to determine the best control measures.
10. Do not apply more than 16 fl. oz./1,000 sq. ft./ calendar year.

IMPORTANT: Bermudagrass can be sensitive to Banner MAXX. Do not exceed 4 fl. oz./1,000 sq. ft. every 30 days on any variety of bermudagrass. In FL, do not apply Banner MAXX to bermudagrass golf course greens when temperatures exceed 90°F.

NOTE: Do not graze animals on treated areas. Do not feed clippings from treated areas to livestock or poultry.

Turfgrass - Specific Diseases, Rates, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Dollar Spot (*Sclerotinia homoeocarpa*)	0.5	22	7 days
	Instructions: Apply when conditions are favorable for disease development.		
	0.5	22	14 days
	Instructions: Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik®, Daconil Ultrex®.		
	1	44	21-28 days
	Instructions: Tank mix with low label rate of one of the following fungicides: Daconil Weather Stik® Daconil Ultrex Chipco® 26019		

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Dollar Spot (*Sclerotinia homoeocarpa*) *(continued)*	1-2	44-88	14-28 days
	Instructions: If using the 1-2 fl. oz./1,000 sq. ft. rate without tank mixing, make no more than 3 consecutive applications for dollar spot control before rotating to an alternate EPA-registered fungicide having a different mode of action.		
Anthracnose (*Colletotrichum graminicola*)	1-2	44-88	14-28 days
	Instructions: Apply when conditions are favorable for disease development. When disease pressure is high, use higher rates of Banner MAXX and shorter intervals. For broad spectrum control, tank mix with a registered contact fungicide at the label rate. If disease is present, mix 2 fl. oz. of Banner MAXX per 1,000 sq. ft. with the label rate of the above mentioned contact fungicides.		

continued...

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Brown Patch (*Rhizoctonia solani*)	1-2	44-88	14-21 days
	Instructions: Begin applications in May or June before disease is present. Tank mix with a registered contact fungicide labeled for brown patch control at the label rate. Under conditions of high temperatures and high humidity, use the higher rates of Banner MAXX and shorter intervals.		
Powdery Mildew *(Erysiphe graminis)* **Rust** *(Puccinia graminis)*	1-2	44-88	14-28 days
	Instructions: Apply when conditions are favorable for disease development. If disease is present, use 2 fl. oz. of Banner MAXX per 1,000 sq. ft.		
Red Thread *(Laetisaria fuciformis)* **Pink Patch** *(Limonomyces roseipellis)*	2	88	14-21 days
	Instructions: Apply when conditions are favorable for disease development.		

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Stripe Smut (*Ustilago striiformis*) (*Urocystis agropyri*)	1-2	44-88	Fall or Spring
	Instructions: Apply once in the fall after grass becomes dormant or in the early spring before grass starts to grow.		
Gray Leaf Spot (*Pyricularia grisea*)	1-2	44-88	14 days
	Instructions: Apply when conditions are favorable for disease development. If using the 1 fl. oz./1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.		
Melting Out Leaf Spot (*Bipolaris* spp.) (*Drechslera* spp.)	1-2	44-176	14 days
	Instructions: Under light to moderate pressure, apply Banner MAXX to reduce the severity of leaf spot and melting out. For broad spectrum disease control, tank mix the 1 fl. oz. Banner MAXX with a registered contact fungicide at the label rate. Tank mix the 1-2 fl. oz./1,000 sq. ft. Banner MAXX rate with a registered contact fungicide at the label rates.		

continued...

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Summer Patch **Poa Patch** *(Magnaporthe poae)*	2 4	88 176	14 days 28 days
	Instructions: Apply Banner MAXX beginning in April. Use the 4 fl. oz./1,000 sq. ft. rate on a 28-day schedule and the 2 fl. oz./ 1,000 sq. ft. rate on a 14-day schedule.		
Take-All Patch *(Gaeumannomyces graminis)*	2-4	88-176	Spring and Fall
	Instructions: Apply Banner MAXX to reduce the severity of take-all patch. Make 1-2 fall applications in September and October or when night temperatures drop to 55° F, and 1-2 spring applications in April and May, depending on local recommendations.		

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Spring Dead Spot *(Leptosphaeria korrae, Leptosphaeria narmari, Ophiosphaerella herpotricha, Gaeumannomyces graminis)*	4	176	30 days
	Instructions: Make 1-3 applications. For one application, apply in September or October. For multiple applications, begin sprays in August.		
Necrotic Ring Spot *(Leptosphaeria korrae)*	4	176	Fall or Spring
	Instructions: Apply in the fall and/or the early spring depending on local recommendations.		
Snowmold **Gray** (*Typhula* spp.) **Pink** (*Microdochium nivale*)	2-4	88-176	Late Fall
	Instructions: Apply one application in the late fall before snow cover. Do not apply on top of snow. For optimum disease control, the 2 and 3 fl. oz. Banner MAXX rates should be tank mixed with either PCNB or chlorothalonil at label rates.		

continued...

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Fusarium Patch *(Fusarium nivale)*	2-4	88-176	Fall-Early Spring
	Instructions: Apply when conditions are favorable for disease development.		
Yellow Patch *(Rhizoctonia cerealis)*	3-4	130-176	Late Fall
	Instructions: Apply one application in the late fall before snow cover. Do not apply on top of snow. If using a 3 fl. oz./ 1,000 sq. ft. rate, tank mix with a registered contact fungicide at the label rate.		
Zoysia Patch, large patch of zoysia *(Rhizoctonia solani)*	3-4	130-176	Early Fall
	Instructions: Make one application in the early fall (mid-September to mid-October) prior to development of disease symptoms. Consult local turfgrass extension experts to determine the optimum application timing for your area.		

Dichondra - Specific Disease, Rate, and Application Timing

Disease	Fl. Oz. per 1,000 sq. ft.	Fl. Oz. per Acre	Application Interval/ Timing
Dichondra Rust *(Puccinia dichondrae)*	2	88	14-21 days
	Instructions: Apply when conditions are favorable for disease development.		

Establishment of Cool Season Turfgrass

Banner MAXX provides control of many diseases of turf, and its primary use is as a fungicide for use against the diseases listed on this label. As an additional benefit, Banner MAXX will improve the rate of establishment when it is applied to cool season grass seedlings or sod.

New Seedlings: Apply 1 fl. oz./1,000 sq. ft. at the 2- to 3-leaf stage of growth for faster root development and top growth.

Sod: Apply 1 fl. oz./1,000 sq. ft. 2-6 weeks before cutting for increased sod knitting and faster establishment after laying.

Disease Control in Nurseries (Field) and Landscape Plantings

1. USE BANNER MAXX IN A PREVENTATIVE DISEASE CONTROL PROGRAM. To determine the use directions for controlling a disease on an ornamental plant species, select the plant species in Table 1. The number in parentheses following the plant species refers you to the disease(s) controlled in Table 2. Find the disease in Table 2. The letter in brackets following the disease refers you to the application regime in Table 3.
2. Allow spray to dry before overhead irrigation is applied.
3. Optimum benefit of Banner MAXX is obtained when used in conjunction with sound disease management practices.

Directions

Banner MAXX may be used at rates of 2-24 fl. oz./100 gal. water for control of diseases of ornamental plant species (see Tables 1, 2, and 3).

NOTE: For outdoor uses, you can apply up to 5.4 gallons of Banner MAXX/acre/crop/calendar year.

For general disease control in landscapes, apply 6-8 fl. oz./100 gal. water every 21 days. For best control, begin Banner MAXX applications before disease development.

Note: Plant tolerances to Banner MAXX have been found acceptable for the specific genera and species of plants listed under the **Directions for Use**. Other plant species may be sensitive to Banner MAXX and diseases other than those listed may not be controlled. Before using Banner MAXX on plants or for diseases that are not listed in the **Directions for Use**, test Banner MAXX on a small scale basis first. Do not apply Banner MAXX to African violets, begonias, Boston fern, or geraniums. Apply the recommended rates for a particular type of disease, i.e., rust, powdery mildew, etc., and evaluate for phytotoxicity and disease control prior to widespread use.

Table 1. Ornamentals – Plant Species

Numbers in parentheses refer to diseases controlled. See Table 2.

Herbaceous Ornamental	Woody Ornamental	Non-Bearing Fruits and Nuts (Nurseries and Landscape Plantings)
Calendula (4a)	Amelanchier (4d)	Apple (3q, 4d, 5a)
Carnation (5f)	Ash (4c)	Bartlett Pear (3q, 4c, 5a)
Chrysanthemum (2a)	Azalea (2c, 4b)	Cherry (2b, 3d)
Delphinium (4a)	Bayberry (3n)	Citrus (3m)
English Ivy (3e)	Camellia (3e)	Nectarine (2b)
	Cotoneaster (3i)	

continued...

Table 1. Ornamentals – Plant Species *(continued)*

Herbaceous Ornamental	Woody Ornamental	Non-Bearing Fruits and Nuts (Nurseries and Landscape Plantings)
Gomphrena (3a) Impatiens (3a, 3b, 4a) Iris (5d) Marigold (3a) Monarda (4c) Phlox (4c) Snapdragon (5d) Sweet William (3k) (*Dianthus barbatus*) Zinnia (4c)	Crabapple (3c, 3q, 4c, 5a) Crape Myrtle (4a) Dogwood (3h,4c) Douglas Fir (5b) Elm (4c) Euonymus (3e, 4c) Hawthorn (5a) Holly (3r) Juniper (1a) Lilac (4c) Linden (3e, 3b, 4b) Magnolia (3e, 4b) Maple (3e, 4f) Oaks (3p) Pines (1b,1c) Poplars (5b) Pyracantha (3o) Red Tip Photinia (3i) Rhaphiolepsis (3e, 3i)	Peach (2b) Pecan (3b, 3c, 3f, 3l, 3n, 4e) Plum (2b) Walnut (3j)

Herbaceous Ornamental	Woody Ornamental	Non-Bearing Fruits and Nuts (Nurseries and Landscape Plantings)
	Rhododendron (2c, 3n) Roses (3g,4e,5c) (Outdoor Use Only) Shasta Fir (5e) Sweetgum (3b, 3c, 3n) Sycamore (3e) Tulip Tree (3e, 4a) Wax Myrtle (3n)	

Table 2. Diseases

Letters in brackets refer to application regimes. See Table 3.

1. Conifer Blights
   a. *Phomopsis juniperovora* (Phomopsis Blight) [B]
   b. *Sirrococcus strobolinus* (Tip Blight) [D]
   c. *Sphaeropsis sapinea* (Diplodia Tip Blight) [B]
2. Flower Blight
   a. *Ascochyta chrysanthemi* (Ray Blight) [C]
   b. *Monilinia* spp. [A]
   c. *Ovulinia* spp. [B]

continued...

Table 2. Diseases *(continued)*

3. Leaf Blights/Spots
   a. *Alternaria* spp. [B]
   b. *Cercospora* spp. (Brown Leaf Spot) [C]
   c. *Cladosporium* spp. (Scab) [C]
   d. *Coccomyces hiemalis* [A]
   e. *Collectrichum* spp. [B]
   f. *Cristulariella* spp. (Zonate Leaf Spot) [C]
   g. *Diplocarpon rosae* (Blackspot) [B]
   h. *Discula* spp. (Anthracnose) [A]
   i. *Fabraea maculata*
      (syn. *Entomosporium maculata*) [B]
   j. *Gnomonia leptostyla* (Anthracnose) [C]
   k. *Heterosporium echinulatum* [B]
   l. *Mycosphaerella caryigena* (Downy Spot) [C]
   m. *Mycosphaerella fructicola* (Greasy Spot) [E]
   n. *Septoria* spp. (Leaf Scorch) [C]
   o. *Spilocaea pyracanthae* [B]
   p. *Tubakia dryina* [D]
   q. *Venturia inaequalis* (Scab) [A]
   r. Rhizoctonia Web Blight [B]
4. Powdery Mildew
   a. *Erysiphe* spp. [B]
   b. *Microsphaera* spp. [C]
   c. *Oidium* spp. [B]
   d. *Podosphaera* spp. [B]
   e. *Sphaerotheca pannosa* [B]
   f. *Phyllactinia* spp. [B]
5. Rust
   a. *Gymnosporangium juniperi-virginianae* [A]
   b. *Melampsora occidentalis* [D]

c. *Phragmidium* spp. [B]
d. *Puccinia* spp. [B]
e. *Pucciniastrum goeppertianum* [D]
f. *Uromyces dianthi* [B]

Table 3. Application Regimes

[A] Mix 2-4 fl. oz. of Banner MAXX in 100 gal. of water and apply as a full coverage spray to the point of drip. Apply every 14-21 days during the period of primary infection. If disease is present, tank mix with an EPA-registered contact fungicide. For flower blight, apply Banner MAXX when there is 5-10% bloom and again at 70-100% bloom. For dogwoods, apply the 2-4 fl. oz. rate every 14 days, or apply 8 fl. oz. of Banner MAXX every 28 days.

[B] Mix 5-8 fl. oz. of Banner MAXX in 100 gal. of water and apply as a full coverage spray to the point of drip. Apply as needed, beginning when conditions are favorable for disease development. For blackspot, apply with a registered contact fungicide labeled for blackspot. For calendula, apply every 30 days. For diplodia tip blight, make 3 applications every 14 days prior to major period of infection. For juniper phomopsis blight, make first application as soon as junipers start to grow, and repeat the applications every 14-21 days during periods of active growth.

continued...

[C] Mix 8-12 fl. oz. of Banner MAXX in 100 gal. of water and apply as a full coverage spray to the point of drip. Apply every 30 days, beginning when conditions are favorable for disease development. For pecans, apply the 12 fl. oz. rate beginning at bud break. Apply 3 times on 14-day intervals. For walnuts, apply 8.5 fl. oz. at 14-21 day intervals. For ray blight, apply 12 fl. oz. at 7-day intervals or 20 fl. oz. at 14-day intervals. For impatiens, bayberry, linden, magnolia, sweetgum and wax myrtle, the maximum use rate is 8 fl. oz.

[D] Mix 16 fl. oz. of Banner MAXX in 100 gal. of water and apply as a full coverage spray to the point of drip. Apply every 14-28 days, beginning when conditions are favorable for disease development. For Douglas fir needle rust, apply once in May. For tip blight, initial application is in mid-late winter; apply 3 times at 2-month intervals.

[E] Mix 20-24 fl. oz. of Banner MAXX in 100 gal. of water and apply as a full coverage spray to the point of drip. Apply during June to August time period.

Note: To avoid possible illegal residues, do not apply to apple, Bartlett pear, cherry, citrus, nectarine, peach, pecan, plum, or walnut trees that will bear harvestable fruit within 12 months.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place. Store in the original container.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

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Chipco® trademark of Bayer CropScience

Unite® trademark of HACO, Inc.

Viton® trademark of E.I. DuPont de Nemours and Company

For non-emergency
(e.g., current product information)
call Syngenta Crop Protection at
1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 741B-L4F 0710
327432

Banner MAXX®

Fungicide

Broad spectrum and systemic disease control for turf and ornamentals

Active Ingredient:

Propiconazole: (CAS No. 60207-90-1)	14.3%
Other Ingredients:	85.7%
Total:	100.0%

Banner MAXX contains a nominal 1.3 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

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 additional precautionary statements, directions for use, environmental hazards, physical and chemical hazards, and chemigation in attached booklet.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-741 EPA Est. 39578-TX-1

Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 741B-L4F 0710 **327432**

1 pint

Net Contents

syngenta®

BAR CODE # IS
(01) 0 07 02941 25000
LAST DIGIT IS CHECK DIGIT
(Barcode type: UCC/EAN 128)

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

Precautionary Statements

Hazards to Humans and Domestic Animals

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist.

FIRST AID 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 or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for 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 do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. **If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice. **NOTE TO PHYSICIAN:** If ingested, induce emesis or lavage stomach. Treat symptomatically. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **HOT LINE NUMBER:** For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**.

STORAGE AND DISPOSAL

Pesticide Storage: Store in a cool, dry place. Store in the original container.
Pesticide Disposal: Pesticide wastes are toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.
Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

SCP 741B-L5F 0710 **327433**

MATERIAL SAFETY DATA SHEET

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, ON N1G 4Z3

In Case of Emergency, Call
1-800-327-8633 (FAST MED)

Date of MSDS Preparation (Y/M/D): 2014-12-31

Supersedes date (Y/M/D): 2011-12-31

MSDS prepared by:
Department of Regulatory & Biological Assessment
Syngenta Canada Inc.

For further information contact:
1-87-SYNGENTA (1-877-964-3682)

SECTION – 1: PRODUCT IDENTIFICATION

Product Identifier: **BANNER MAXX® Fungicide** Formulation No.: A6780D
Registration Number: 27003 (Pest Control Products Act)
Chemical Class: Triazole Derivative Fungicide

Active Ingredient (%): Propiconazole (14.3%) CAS No.: 60207-90-1
Chemical Name: 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole
Product Use: Fungicide for the control of systemic diseases of golf course turf and nursery crops. For further details please refer to product label.

SECTION – 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	WHMIS†
Tetrahydrofurfuryl Alcohol (THFA) CAS No. 97-99-4	Not Established	Not Established	0.5 ppm (TWA)****	No	Yes
Propiconazole (14.3%)	Not Established	Not Established	8 mg/m TWA***	No	Not Established

*** Syngenta Occupational Exposure Limit (OEL)
**** Recommended by AIHA (American Industrial Hygiene Association)
† Material listed in Ingredient Disclosure List under Hazardous Products Act.

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
Syngenta Hazard Category: B, S

SECTION – 3: HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Irritating to eyes. Vapours may cause drowsiness and dizziness. May be harmful if swallowed and enters airway.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Yellow to orange liquid.
Odour: Aromatic solvent.

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. Can release vapours that form explosive mixtures at temperatures at or above the flash point. Dense vapours can flow along surfaces to distant ignition sources and flash back.

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Potential Health Effects

Relevant routes of exposure: Skin, eyes, mouth, lungs.

SECTION – 4: FIRST AID MEASURES

IF POISONING IS SUSPECTED, immediately contact the poison information centre, doctor or nearest hospital. Have the product container, label or Material Safety Data Sheet with you when calling Syngenta, a poison control center or doctor, or going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given. Call the Syngenta Emergency Line [**1-800-327-8633** (**1-800-FASTMED**)], for further information.

EYE CONTACT: Flush eyes with clean water, holding eyelids apart for a minimum of 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta, a poison control center or doctor for treatment advice. Obtain medical attention immediately if irritation persists.

SKIN CONTACT: Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Flush skin with plenty of water for 15-20 minutes. Call Syngenta, a poison control centre or doctor for treatment advice.

INHALATION: Move victim to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call Syngenta, a poison control centre or doctor for treatment advice.

INGESTION: If swallowed, immediately contact Syngenta, a poison control centre, doctor or nearest hospital for treatment advice. Do not induce vomiting unless directed by a physician or a poison control center. Do not give **any** liquid to the person. Call Syngenta, a poison control centre or doctor for treatment advice.

NOTES TO PHYSICIAN:

There is no specific antidote if this product is ingested. Treat symptomatically. Contains tetrahydrofurfuryl alcohol - vomiting may cause aspiration pneumonia.

MEDICAL CONDITIONS KNOWN TO BE AGGRAVATED:

Persons with preexisting dermatitis, respiratory disorders, or an allergic history should use extra care in handling this product.

SECTION – 5: FIRE FIGHTING MEASURES

Flash point and method: 82.8 ºC (Setaflash).
Upper and lower flammable (explosive) limits in air: Not available.
Auto-ignition temperature: Not Available.
Flammability: Combustible liquid.
Hazardous combustion products: Toxic, flammable fumes are released by thermal decomposition in a fire. Thermal decomposition products may include oxides of nitrogen, carbon and chlorine..
Conditions under which flammability could occur: Can release vapours that form explosive mixtures at temperatures at or above the flash point. Heavy vapours can flow along surfaces to distant ignition sources and flash back. Keep fire exposed containers cool by spraying with water.
Extinguishing media: Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist, (avoid use of water jet). Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.
Sensitivity to explosion by mechanical impact: No.
Sensitivity to explosion by static discharge: No.

National Fire Code classification: Class IIIA Combustible Liquid.

SECTION – 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation and wear equipment and clothing as described in Section 8 and/or the product label.

Procedures for dealing with release or spill: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Sections 7 and 8. Pump or scoop large amounts of liquid into a disposable container. Absorb remaining liquid or smaller spills with clay, sand or vermiculite. Scoop or sweep up material and place into a disposal container. On soils, small amounts will naturally decompose. For large amounts, skim off the upper contaminated layer and collect for disposal. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal. Spillages or uncontrolled discharges into watercourses must be reported to the appropriate regulatory authority.

SECTION – 7: HANDLING AND STORAGE

Handling practices: KEEP OUT OF REACH OF CHILDREN. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Avoid breathing vapours or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, applying cosmetics or using the toilet. Wash contaminated clothing before re-use and separate from household laundry. Keep containers closed when not in use. Protect product, wash or rinse water, and contaminated materials from uncontrolled release into the environment, or from access by animals, birds or unauthorized people.

Appropriate storage practices/requirements: Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose containers to temperatures above 40 °C. Keep separate from other products to prevent cross contamination. Rotate stock. Clean up spilled material immediately.

SECTION – 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Applicable control measures, including engineering controls: This product is intended for use outdoors where engineering controls are not necessary. If necessary, ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV. Warehouses, production area, parking lots and waste holding facilities must have adequate containment to prevent environmental contamination. Provide separate shower and eating facilities.

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

CONSULT THE PRODUCT LABEL FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS.

Personal protective equipment for each exposure route:

General: Avoid breathing dust, vapours or aerosols. Avoid contact with eye, skin and clothing. Wash thoroughly after handling and before eating, drinking, applying cosmetics or handling tobacco.

INGESTION: Do not eat, drink, handle tobacco, or apply cosmetics in areas where there is a potential for exposure to this material. Always wash thoroughly after handling.

EYES: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SKIN: Where contact is likely, wear chemical-resistant gloves (such as nitrile or butyl), coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

INHALATION: A combination particulate/organic vapour respirator should be used until effective engineering controls are installed to comply with occupational exposure limits, or until exposure limits are established. Use a NIOSH approved respirator with an organic vapour (OV) cartridge or canister with any R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

SECTION – 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to orange liquid.
Formulation Type: Water-based micro emulsion concentrate.
Odour: Aromatic solvent.
pH: 4-7 (1% emulsion in water).
Vapour pressure and reference temperature: 4.2×10^{-7} mmHg @ 25 °C (Propiconazole Technical)
Vapour density: Not available.
Boiling point: Not available.
Melting point: Not available.
Freezing point: -34 °C.
Specific gravity or density: 1.09 g/cm^3 @ 20 °C.
Evaporation Rate: Not available.
Water/oil partition coefficient: Log P = 3.65 (Propiconazole Technical).
Odour threshold: Not available.
Viscosity: 50 cps (or mPas) @ 21 °C.
Solubility in Water: 0.1 g/L @ 20 ºC (Propiconazole Technical).

SECTION – 10: STABILITY AND REACTIVITY

Chemical stability: Stable under normal use and storage conditions.
Conditions to avoid: Keep away from heat, open flames or other ignition sources.
Incompatibility with other materials: Strong oxidizing.
Hazardous decomposition products: Can decompose at high temperatures forming toxic gases.
Hazardous polymerization: Will not occur.

SECTION – 11: TOXICOLOGICAL INFORMATION

Acute toxicity/Irritation Studies (Finished Product):

Ingestion:	Low AcuteToxicity Oral (LD50 Rat):	4,340 mg/kg body weight
Dermal:	Low AcuteToxicity Dermal (LD50 Rabbit):	> 2,020 mg/kg body weight
Inhalation:	Low AcuteToxicity Inhalation (LC50 Rat):	> 2.6 mg/L air - 4 hours
Eye Contact:	Moderately Irritating (Rabbit)	
Skin Contact:	Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Reproductive/Developmental Effects
Propiconazole Technical: None observed.

Chronic/Subchronic Toxicity Studies
Propiconazole Technical: None observed.

Carcinogenicity
Propiconazole Technical: Long-term exposure of mice to high dose levels of propiconazole produced an increase in liver tumors in male mice. Propiconazole is not considered to be carcinogenic.

Other Toxicity Information:

None.

Toxicity of Other Components

The acute toxicity test results reported in Section 11, above, for the finished product take into account any acute hazards related to the "other components" in the formulation.

Tetrahydrofurfuryl Alcohol (THFA):

Inhalation of vapours at high concentrations can cause central nervous system effects (dizziness, headache), irritation to eyes or respiratory tract. Chronic overexposure may affect the kidney.

Other materials that show synergistic toxic effects together with the product: None known.

Target Organs

Active Ingredients

Propiconazole Technical:	Liver, skin, eye

Inert Ingredients

Tetrahydrofurfuryl Alcohol (THFA):	CNS, kidney.

SECTION – 12: ECOLOGICAL INFORMATION

Summary of Effects

The active ingredient, propiconazole, is practically nontoxic to plants birds and insects (bees) but is very toxic to aquatic life.

Eco-Acute Toxicity

Propiconazole Technical:

Green Algae 5-Day EC_{50}	1.6 ppm
Invertebrates (*Daphnia magna*) 48-hour LC_{50}/EC_{50}	4.8 ppm
Fish (Rainbow Trout) 96-hour LC_{50}/EC_{50}	0.85 ppm
Bird (Mallard Duck) 14-Day LC_{50}	2,510 mg/kg

Environmental Fate

The active ingredient, propiconazole, has a low bioaccumulation potential, low mobility, and low to moderate persistence in soil and water.

SECTION – 13: DISPOSAL CONSIDERATIONS

Waste disposal information: Do not reuse empty containers unless they are specifically designed to be re-filled. Empty container retains product residue. Dispose of empty containers in accordance with local regulations. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used, and proper documents must accompany the shipment.

SECTION – 14 : TRANSPORT INFORMATION

Shipping information such as shipping classification:

TRANSPORTATION OF DANGEROUS GOODS CLASSIFICATION - ROAD/RAIL

Not Regulated.

SECTION – 15: REGULATORY INFORMATION

WHMIS classification for product: Exempt

A statement that the MSDS has been prepared to meet WHMIS requirements, except for use of the 16 headings.

This MSDS has been prepared in accordance with WHMIS requirements, but the data are presented under 16 headings.
Other regulations; restrictions and prohibitions

Pest Control Products (PCP) Act Registration No.: 27003

SECTION – 16: OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Syngenta will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant MSDS. Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

Prepared by: Syngenta Canada Inc.
1-87-SYNGENTA (1-877-964-3682)

Syngenta Canada Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date thereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates to the specific product designated and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of Syngenta Canada Inc., Syngenta Canada Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

BANNER MAXX® is a trademark of a Syngenta Group Company.

INFUSE
SYSTEMIC DISEASE CONTROL

- PREVENTS AND STOPS MAJOR DISEASES ON ROSES, FLOWERS, LAWNS, TREES AND SHRUBS.
- ABSORBED INTO THE PLANT.
- PREVENTS AND STOPS... BLACK SPOT, DOLLAR SPOT, RUST, BROWN PATCH, POWDERY MILDEW, LEAF SPOT, AND MORE!

Store and transport in an upright position.
EPA Est. No. 4-NY-1 EPA Reg. No. 100-773-4

Buyers Guarantee Limited to Label Claims.

Distributed by
Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

DIRECTIONS FOR USE

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

STOP. READ ALL INSTRUCTIONS INSIDE BEFORE USE.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR INJURY TO DESIRABLE PLANTS.

GENERAL INFORMATION

This water-based systemic fungicide effectively prevents and stops major diseases on roses, flowers, lawns, trees and shrubs.

USE TIPS:

- This product is highly effective when it is used to prevent diseases or applied at the first sign of disease. Consider treating early in the season. This product will not eliminate disease already present.
- When used as directed, this product is safe to plants and controls the diseases listed. Plants not listed may be injured by this product and diseases not listed may not be controlled.
- Do not apply this product to African Violets, begonias, Boston ferns, or geraniums.
- If you need more information about lawn and ornamentals diseases, contact your local County Extension Service.

MIXING PROCEDURES

Shake well before using. Apply only with a pump-up pressure sprayer, concentrate plus water-style, or a hose-end sprayer.

NOTE: ½ fl. oz. = 1 Tablespoon 1 fl. oz. = 2 Tablespoons

Food utensils, such as measuring cups and spoons, must not be used for food purposes after use in measuring pesticides.

PUMP-UP SPRAYER

1. Fill with required amount of water.
2. Add the amount of concentrate specified in the charts that follow.
3. Shake well before application.

CONCENTRATE PLUS WATER STYLE SPRAYER

1. From the following charts, determine the amount of concentrate required.
2. Pour concentrate into sprayer jar to the required “fl. oz.” level.
3. Then add the required amount of water to the “gals.” level.
4. Replace sprayer top on jar and shake well before spraying.

DIAL-STYLE HOSE-END SPRAYER

1. Set sprayer on the “fl. oz./gallon” level specified in the following chart.
2. Use only enough product for the area to be treated.
3. Close sprayer, attach to hose and apply product to lawn. (For example: To treat a 1,000 sq. ft. lawn for powdery mildew, pour 12 fl. oz. into sprayer jar. Set sprayer dial at 3 fl. oz. per gallon.)

APPLICATION INSTRUCTIONS

STOP. DO NOT ALLOW PEOPLE OR PETS TO CONTACT TREATED AREAS UNTIL SPRAY HAS DRIED.

ROSES AND FLOWERS

General Directions

1. Apply product to the point just when it begins to run off of the leaves.
2. Allow spray to completely dry before watering.

Plant	Disease	Amount of Product	Comments
Roses	Powdery Mildew	1 Tablespoon (½ fl. oz.) per gal. of water	Thorough coverage needed for best results. Begin application at bud break. Treat every 10 days.
	Black Spot, Rust	2 Tablespoons (1 fl. oz.) per gal. of water	Treat every 10 days. **Note:** May not provide 100% control of black spot under severe conditions.
Calendula	Powdery Mildew	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 30 days.
Carnation, Iris	Rust	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 10 - 14 days.
Chrysanthemums	Ray Blight	2 Tablespoons (1 fl. oz.) per gal. of water	Apply every 7 days.
Delphinium	Powdery Mildew	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 14 days.
Marigold	Leaf Blight, Leaf Spots	2 Tablespoons (1 fl. oz.) per gal. of water	Apply every 14 days.

Plant	Disease	Amount of Product	Comments
Phlox, Zinnia	Powdery Mildew	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 10 - 14 days.
Snapdragons	Rust	2 Tablespoons (1 fl. oz.) per gal. of water	Apply every 10 days.
Sweet William	Leafspot	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 14 days.

LAWNS

1. Apply after mowing or allow sprayed area to completely dry before mowing.
2. Measure the length and width of area to be treated before application.
   Length x width = square feet. For example, an area 25 ft. long and 20 ft. wide is 500 sq. ft.

ESTABLISHED LAWNS

Disease	Amount of Product	Comments
Brown Patch	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	If needed, repeat treatment every 10 days. First application should be in May or June before disease is present.
Dollar Spot, Powdery Mildew, Rust, Anthracnose	3 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	Apply every 14 days.
Fusarium Patch	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	If needed, repeat every 21 days when conditions are favorable for disease to occur.
Necrotic Ring Spot	9 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	Apply in the Fall and/or the early spring.
Red Thread, Pink Patch, Dichondra Rust on Dichondra Lawns	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	If needed, repeat every 21 days when conditions are favorable for disease to occur.

Disease	Amount of Product	Comments
Snowmold (Gray or Pink)	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	Apply twice in the Fall prior to snow cover waiting 14 days between each application.
Spring Dead Spot	9 fl. oz in 1 gal. of water per 250 sq. ft. of lawn	Apply when conditions are favorable for disease development.
Stripe Smut	3 fl oz. in 1 gal. of water per 250 sq. ft. of lawn	Apply in Fall after grass is dormant or in early Spring before grass starts to grow.
Take-All Patch	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	Apply twice in the Fall (Sept. and Oct.) and twice in the Spring (April and May). Southern lawns also need to be treated twice in the summer (June-August).
Zoysia Patch	5 fl. oz. in 1 gal. of water per 250 sq. ft. of lawn	Make one application in the early Fall prior to development of disease symptoms.

NEW SEEDINGS

Amount of Product	Comments
5 fl. oz. in 2 gals. of water per 500 sq. ft. of lawn	Apply at the 2 to 3-leaf stage of growth for faster root development and top growth.

TREES AND SHRUBS

General Directions

1. Spray just until product runs off leaves. 2. Allow the spray to dry before watering plants.

Plant	Disease	Amount of Product	Comments
Ash	Powdery Mildew	3 Tablespoons (1 ½ fl. oz.) per gal. of water	Apply every 21 days.
Azalea	Flower blight	½ Tablespoon (¼ fl. oz.) per gal. of water	Apply when there is a 5% bloom and again at 70% bloom.
Crab Apple **Note:** Do not use fruit from treated crab apples for food purposes.	Scab, Rust	½ Tablespoon (¼ fl. oz.) per gal. of water	Apply when buds just begin to break open. For scab, apply every 14 days. For rust, make 3 applications, beginning when buds just begin to break open. Apply at 7 day intervals.
	Powdery Mildew	1 ½ Tablespoons (¾ fl. oz.) per gal. of water	Apply every 14 days.
Crape Myrtle	Powdery Mildew	3 Tablespoons (1½ fl. oz.) per gal. of water	Apply every 21 days.
Dogwood	Anthracnose	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 14 - 28 days.
Douglas Fir, Shasta Fir	Needle Rust	3 Tablespoons (1½ fl. oz.) per gal. of water	For Douglas Fir, apply every 21 days. For Shasta Fir, apply in May-June before disease occurs.
Hawthorne, Poplars	Rust	½ Tablespoon (¼ fl. oz.) per gal. of water	Apply every 14 to 21 days.
Jeffrey Pine	Tip Blight	3 Tablespoons (1½ fl. oz.) per gal. of water	Make the first application in mid-late winter (Nov.-Jan.) Apply every 2 months up to 3 times.

Plant	Disease	Amount of Product	Comments
Juniper	Blight	1 Tablespoon (½ fl. oz.) per gal. of water	Apply every 14 to 21 days.
Lilac	Powdery Mildew	3 Tablespoons (1 ½ fl. oz.) per gal. of water	Apply every 21 days.
Oak, Red Tip Photinia	Leaf Spot	3 Tablespoons (1 ½ fl. oz.) per gal. of water	Apply every 14 days.
Pines	Conifer Blights	3 Tablespoons (1 ½ fl. oz.) per gal. of water	Apply every 14 to 21 days.
Pyracantha	Leaf Spot	½ Tablespoon (¼ fl. oz.) per gal. of water	Apply every 14 to 21 days.
Rhododendron	Flower Blight	½ Tablespoon (¼ fl. oz.) per gal. of water	Apply when there is a 5% bloom and again at 70% bloom.

NON-BEARING FRUIT AND NUT TREES

General Directions

1. Non-bearing fruit and nut trees are those trees that will not produce fruit for at least one year after application of this product.
2. Apply product to the point just when it begins to run off of the leaves.

Plant	Disease	Amount of Product	Comments
Apple	Scab	½ Tablespoon (¼ fl. oz.) per gal. of water	Start applications when leaves start growing in the Spring and spray every 14 days.
	Rust	½ Tablespoon (¼ fl. oz.) per gal. of water	Make 3 applications beginning when buds just begin to break open. Apply at 7-day intervals.
	Powdery Mildew	1 Tablespoon (½ fl. oz.) per gal. of water	Start applications in early Spring and spray every 14 days.
Citrus	Greasy Spot	4 Tablespoons (2 fl. oz.) per gal. of water	Apply June-August every 21 days.
Pecan	Scab, Powdery Mildew, Downy Spot, Zonate Leaf Spot, Fungal Leaf Scorch, Brown Spot	2 Tablespoons (1 fl. oz.) per gal. of water	Start applications at bud break and make 3 applications at 14-day intervals.
Walnut	Anthracnose	2 Tablespoons (1 fl. oz.) per gal. of water	Apply every 14 days.

BEARING FRUIT AND NUT TREES

Plant	Disease	Amount of Product	Comments
Apricots, Cherries, Nectarines, Peaches, Plums and Prunes Do not apply to "Stanley" type plums.	Brown Rot Blossom blight, Powdery Mildew, Cherry Leaf Spot and Fruit Brown rot	2 Tablespoon (1 fl. oz.) per gal. of water	Start applications in early Spring and spray every 21 days, making no more than 4 applications.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place away from heat or open flame.
Pesticide Disposal: ***If empty:*** Non-refillable container. Do not reuse or refill 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.

FIRST AID	
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 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 by mouth to an unconscious person.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
NOTE TO PHYSICIAN If ingested, induce emesis or lavage stomach. Test symptomatically.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.	

Precautionary Statements
Hazards to Humans and Domestic Animals

WARNING: Causes substantial, but temporary eye injury. Do not get in eyes. Wear goggles or safety glasses. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Do not allow people or pets to contact treated areas until spray is dry.

Environmental Hazards

This pesticide is toxic to fish. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Questions or Comments? Call 1-800-536-8231.

NOTICE: To the extent consistent with applicable law, buyer assumes all responsibility for safety and use not in accordance with label directions.

For information on pesticide products (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard communication Standard,
29 CFR 1910.1200. Standard must be consulted
requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved for specific
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

Bonide INFUSE Systemic Disease Control **ID # 1007734**

Date: October 30, 2006

Section I

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

(800) 424-9300 (Chemtrec)
(315) 736-8231

Section II - Hazardous Ingredients/Identity

Hazardous Components (Specific Chemical Identity: Common Names(s)	OSHA	PEL	ACGIN	TLV	Other Limits	% (Optional)
Propiconazol (CAS# 60207-90-1)	NE	NE	NE	NE		1.55%

Section III – Fire/Explosive Hazard Data

FLASHPOINT: >200°F FLAMMABLE LIMITS: N/E

FIRE/EXPLOSION HAZARDS: Isolate fire area. Evacuate downwind residents and all areas where fire seriously threatens the product containers. Wear full protective clothing including rubber boots, neoprene gloves and self-contained breathing apparatus. Attempt to keep containers cool. Do no breathe or contact smoke or vapors. Contain the run-off, if possible, for proper disposal.

FIRE EXTINGUISHING MEDIA: Water spray, foam, DCP, $C0_2$

Section IV – Health Hazard Data

NOTES TO PHYSICIAN:

There is no specific antidote if this product is ingested. Treat symptomatically. Contact with eyes may require specialized ophthalmologic attention. Do not include emesis. If a large amount has been ingested, lavage stomach carefully to avoid aspiration

Symptoms of Acute Exposure

Exposure to eyes can cause substantial, but temporary eye irriation. Prolonged inhalation of vapors may irritate throat and nasal passages.

Section V – First Aid Measures

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

INGESTION: Do Not Induce Vomiting. If victim is fully conscious, give a large quantity of water to drink and get medical attention. Never give anything by mouth to an unconscious person.

EYE CONTACT: Immediately rinse eyes with a large amount of running water. Hold eye lids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

SKIN CONTACT: Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminated prior to use.

INHALATION: Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

Section VI - Physical and Chemical Properties

APPEARANCE: Clear yellow-amber liquid.
SOLUBILITY IN WATER: 0.1 g/L @ 20°C
MELTING POINT: 0°C
VAPOR DENSITY (Air = 1): N/A

ODOR: Slightly sweet aromatic odor
BOILING POINT: N/E
VAPOR PRESSURE: N/E
SPECIFIC GRAVITY: 1.01

Section VII– Reactivity Data

STABILITY: Stable.
Hazardous Polymerization: Will Not Occur
INCOMPATIBILITY (Specific materials to avoid): Flame, Heat, Ignition Sources and Strong Oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS. None Known

Section VIII - Ecological Data

ACTION TO TAKE FOR SPILLS/LEAKS: Isolate area and keep unauthorized people away. Do not walk through spilled material. Avoid breathing vapors and skin contact. Use recommended protective equipment to dike contaminated area with absorbent granules, soil, sand, etc. If large spill, material should be recovered. Small spills can be absorbed with absorbent granules, spill control pads, or any covered container for reuse or disposal. Scrub contaminated area with soap and water. Rinse with water. Contaminated soil may have to be removed and disposed. Do not allow material to enter streams, sewers, or other waterways.
DISPOSAL METHOD: Follow container label instructions for disposal of wastes generated during use in compliance with the FIFRA product label. Do not reuse container.

Section IV – Regulatory Information

DOT Classification: Not applicable, No Label or Placard Required.
SARA Title III Classification: Acute Health Hazard, Chronic Health Hazard
NFPA Hazard Rating
Health 2
Flammability 1
Reactivity 0
[0=Least, 1=Slight, 2=Moderate, 3=High, 4=Severe]

NOTICE: This information is believed to be accurate and reliable. However, no guarantee expressed or implied is made with respect to the information contained herein.

KEEP OUT OF REACH OF CHILDREN

ABBREVIATION KEY

N/A: NOT AVAILABLE OR APPLICABLE	N/E: NOT ESTABLISHED	ND: Not Determined
TLV: THRESHOLD LIMIT VALUE	TWA: TIME WEIGHTED AVG./8 HOUR WORKDAY	
STEL: SHORT TERM EXPOSURE LIMIT	D.O.T.: DEPARTMENT OF TRANSPORTATION	

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES
Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

ID No. 1007734

LIQUID COPPER FUNGICIDE
CONCENTRATE

Where To Use

- For Roses, Fruits & Vegetables
- Ornamentals and Turf
- Controls Powdery Mildew, Black Spot and Rust!

Contains Cueva™ Fungicide Concentrate, a trademark of W. Neudorff GmbH KG

Manufactured under a license of W. Neudorff GmbH KG, Germany.

EPA Est. No. 4-NY-1
EPA Reg. No. 67702-2-4

Distributed by
Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424

DIRECTIONS FOR USE

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

Read and follow all applicable directions and precautions on this label before using.

Do not allow adults, children or pets to enter the treated area until sprays have dried. Do not apply this product in a way that will contact adults, children or pets, either directly or through drift.

APPLICATION DIRECTIONS

Shake well before use. Most conventional liquid pesticide plant sprayers can be used to apply this product to plants. Reapply after rain, following the application interval in the application notes.

To control **powdery mildews**, use a solution of 0.5 to 2.0 fluid ounces of this product in a gallon of water. For best control, start spraying before the disease is visible or when mildew is first visible on the plant. Spray all plant parts thoroughly (top and bottom of leaves), and repeat every 7 to 10 days. When powdery mildew presence is expected on a plant, spray the plants at the minimum application interval during the first 2 weeks after emergence.

To control **downy mildews, leaf and fruit spots, blights, and rust,** use a solution of 0.5 to 2.0 fluid ounces of this product in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed (top and bottom of leaves). For best control, begin treatment 2 weeks before disease normally appears or when weather forecasts predict a long period of wet weather. Alternatively, begin treatment when disease first appears, and repeat as long as needed. See application notes for the specific crop application interval. Use 2 fluid ounces per gallon of water, sprayed every 7-10 days, following heavy rain or when the amount of disease is increasing rapidly. This higher rate should be used for preventing late blight on potato and related plants. If possible, time applications so that at least 12 hours of dry weather follows application.

To prevent **fruit rots,** use a solution of 0.5 to 2.0 fluid ounces of this product in a gallon of water. Ensure that all surfaces of the plant are thoroughly sprayed (top and bottom of leaves). Apply at the start of flowering and continue every 7 to 10 days until harvest. Fungicidal sprays are especially warranted when weather forecasts predict a long period of wet weather.

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT

Ornamental Plant	Common Name	Diseases Controlled
Aechmea fasciata	Urn plant, bromeliad	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight
Aeschynanthus pulcher	Lipstick vine	Botrytis blight, Leaf spot (fungal)
Aglaonema species	Chinese evergreen	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Anthurium species	Tailflower	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight, Soft rot
Aphelandra squarrosa	Zebra plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Araucaria heterophylla	Norfolk Island pine	Colletotrichum needle blight
Asplenium nidus	Bird's nest fern	Bacterial leaf spot and blight
Brassaia actinophylla	Schefflera	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Caladium species	Caladium	Bacterial leaf spot and blight, Rhizoctonia blight
Calathea species	Rattlesnake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
Caryota mitis	Fishtail palm	Bacterial leaf spot and blight, Leaf spot (fungal)
Chamaedorea species	various palms	Leaf spot
Chrysalidocarpus lutescens	Areca palm	Leaf spot
Cissus species	Grape ivy	Anthracnose leaf and fruit spot, Botrytis blight, Downy mildew, Powdery mildew, Rhizoctonia blight
Codiaeum variegatum	Croton	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
Cordyline terminalis	Ti plant	Anthracnose leaf and fruit spot, Leaf spot (fungal)
Chryptanthus species	Bromeliad, earthstar	Anthracnose leaf and fruit spot
Dieffenbachia species	Dieffenbachia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Dracaena species	Dracaena, Corn plant	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal)
Epipremnum aureum	Pothos, Devil's ivy	Bacterial leaf spot and blight, Rhizoctonia blight
Euphorbia milii	Euphorbia	Rhizoctonia blight
Fatsia japonica	Japanese fatsia	Bacterial leaf spot and blight, Leaf spot (fungal) Rhizoctonia blight
Ficus benjamina	Weeping fig	Leaf spot (fungal)
Ficus elastica	India-rubber tree	Leaf spot (fungal), Botrytis blight
Fittonia verschaffeltii	Nerve plant	Rhizoctonia blight
Hedra helix	English ivy	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Hoya carnosa	Wax plant	Botrytis blight, Leaf spot (fungal), Rhizoctonia blight
Maranta leuconeura	Prayer plant	Leaf spot (fungal)
Monstera deliciosa	Swiss cheese plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Rhizoctonia blight, Soft rot
Nephrolepis exaltata	Boston fern	Bacterial leaf spot and blight, Botrytis blight, Rhizoctonia blight
Peperomia species	Peperomia	Leaf spot (fungal), Rhizoctonia blight
Philodendron species	Philodendron	Anthracnose leaf and fruit spot, Botrytis blight, Leaf spot (fungal)

ORNAMENTALS: DISEASES CONTROLLED, LISTED BY PLANT Cont.

Ornamental Plant	Common Name	Diseases Controlled
Pilea species	Aluminum plant	Bacterial leaf spot and blight, Anthracnose leaf and fruit spot, Leaf spot (fungal), Rhizoctonia blight
Platycerium bifurcatum	Staghorn fern	Bacterial leaf spot and blight, Rhizoctonia blight
Polyscias species	Aralia	Anthracnose leaf and fruit spot, Bacterial leaf spot and blight, Leaf spot (fungal)
Rhapis species	Ladyfinger palm	Leaf spot (fungal)
Rhoeo spathacea	Oyster plant	Leaf spot (fungal)
Saintpaulia ionantha	African violet	Bacterial leaf spot and blight, Botrytis blight, Leaf spot (fungal), Powdery mildew
Sansevieria triafasciata	Snake plant	Bacterial leaf spot and blight, Leaf spot (fungal)
Schefflera arboricola	Dwarf Schefflera	Bacterial leaf spot and blight, Leaf spot (fungal)
Schlumbergera species	Cactus	Leaf spot (fungal)
Sedum species	Sedum	Leaf spot (fungal)
Spathiphyllum species	Spathe flower	Leaf spot (fungal), Rhizoctonia blight
Syngonium podophyllium	Nephthytis	Bacterial leaf spot and blight, Leaf spot (fungal), Rhizoctonia blight
Yucca species	yucca	Leaf spot (fungal)

DIRECTIONS FOR USE ON ORNAMENTALS AND TURF

The ornamental and turf species listed may be treated with this product. Unless otherwise stated, mix 0.5 to 2 fluid ounces in one gallon of water and spray all plant surfaces thoroughly (top and bottom of leaves). When necessary, repeat sprays every 7 to 10 days. Use the higher rate to control diseases that may go dormant and overwinter. This product may cause some copper toxicity on some plant species. Before spraying a specific plant species, consult your State Experiment Station or make a test spray.

Crop	Diseases Controlled	Application Notes
Pine	Needle blight	Mix at a rate of 0.5 to 2.0 fluid ounces of this product with one gallon water. Spray until needles are thoroughly wet with spray. Apply when new needles are just emerging.
Rose and Ornamental Shrubs (Such as; Crape Myrtle, Forsythia, Hydrangea, Willow, Mock-Orange, Deutzia, Pyracantha, Japanese quince, Abelia, Summersweet)	Blackspot, Downy mildew, Gray mold (Botrytis), Leafspots, Powdery mildew, Rust	This product may cause copper toxicity on some rose varieties. Copper toxicity appears as purple spots. For Black spot, mix at a rate of 1.44 fl. ozs. of this product per gallon of water. For Powdery Mildew, mix at a rate of 1.08 fl. ozs. of this product per gallon of water. In damp cool conditions (below 60°F), phytotoxicity is likely to occur with the use of this product.
Sycamore	Anthracnose leaf spot	Make first application just before buds begin to swell, and repeat twice, at 7-day intervals.
Turf	Ascochyta leaf blight, Cercospora leaf spots, Dollar spot	Mix 1.5 to 6 fluid ounces with 2.5 gallons of water and apply to 1,000 sq. ft. For best control, begin treatment 2 weeks before disease normally appears. Alternatively, begin treatment when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. To reduce Ascochyta leaf blight mow less frequently, only as necessary to maintain recommended height. Water before noon to allow grass to dry. Water thoroughly only as required to avoid moisture stress. Apply this product when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.

Crop	Diseases Controlled	Application Notes
Turf (continued)	Rust	To reduce rust mow frequently to reduce rust spore production. Water and fertilize lawn as required to avoid moisture and nutrient stress. Water before noon to allow grass to dry. Apply this product when disease first appears, and repeat at 7 to 10 day intervals for as long as needed. In frequently diseased areas, prune adjacent trees and shrubs to reduce turf shading and to improve air movement.

DIRECTIONS FOR USE ON FRUITS AND VEGETABLES

Unless otherwise stated below, mix 0.5 to 2.0 fluid ounces of this product with 1 gallon of water. Use sufficient water to ensure good coverage, including tops and bottoms of leaves. For best control, begin treatment 2 weeks before disease normally appears or when weather forecasts predict a long period of wet weather. Alternatively, begin treatment when disease first appears and repeat as long as needed. See application notes for specific plant application interval. Use the higher rate at the minimum application interval following heavy rain or when the amount of disease is increasing rapidly. If possible, time applications so that 12 hours of dry weather follow application. Use the higher rate to control diseases that may go dormant and overwinter.

Crop	Diseases Controlled	Application Notes
Bean, Pea	Anthracnose leaf and fruit spot, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Downy mildew, Gray mold (Botrytis), Powdery mildew, White mold (Sclerotinia)	Repeat application every 7-10 days if necessary.
Beet, Chard, Spinach	Cercospora leaf spot, Downy mildew, White rust, Powdery Mildew	Repeat application every 7-10 days if necessary.
Carrots	Alternaria leaf blight, Bacterial leaf blight, Cercospora leaf blight	Repeat application every 7-10 days if necessary.
Celery and Celeriac	Bacterial leaf spot, Cercospora (early) blight, Septoria (late) blight	Repeat application every 7-10 days if necessary.

Crop	Diseases Controlled	Application Notes
Citrus (Grapefruit, Lemon, Lime, Orange, Pummelo, Tangerine)	Melanose spot, greasy spot, citrus scab, Alternaria brown spot, citrus canker, *Phytophthora* brown rot, and *Septoria*	Repeat every 2 weeks if necessary. May cause phytotoxicity if conditions are conducive, when mixed with other products, or when applied to citrus seedlings grown in greenhouses or shadehouses.
Corn	Alternaria blight, Anthracnose, Ascochyta leaf and pod spot, Bacterial blights (halo, common and brown spot), Bacterial leaf spot, Downy mildew, Gray mold, Southern leaf blight, Cercospora leaf blight, Common or Southern Rust, Gray Leaf Spot, Stewart's Wilt*, Bacterial Stalk Rot*	Repeat application every 7-10 days if necessary.
Crucifer Crops (Bok Choy, Broccoli, Brussels sprouts, Canola, Cauliflower, Cabbage, Kale, Kohlrabi, Mustard, Pak-Choi, Rape, Rutabaga, Turnip)	Alternaria blight, Bacterial leaf spot, Downy mildew, Powdery mildew, White mold (Sclerotinia)	Repeat application every 7-10 days if necessary.
Cucurbits (Cucumbers, Cantaloupe, Squash, Pumpkin, Zucchini)	Alternaria blight, Angular leaf spot, Anthracnose leaf and fruit spot, Downy mildew, Gray mold, Scab, Ulocladium leaf spot, Powdery mildew	For cucumbers grown in a greenhouse, apply this product 2 times per week in the first 2 weeks after emergence, followed by sprays every 7 days.
Currant and Gooseberry	Anthracnose leaf and fruit spot, Phyllosticta, Septoria leaf spots, Powdery mildew	Repeat application every 7-10 days if necessary.

Crop	Diseases Controlled	Application Notes
Ginseng	Alternaria blight, Botrytis blight, Phytophthora, Powdery mildew	Repeat application every 7-10 days if necessary.
Grapes	Downy mildew, Black rot, Phomopsis Cane and Leaf Spot, Powdery mildew, Gray mold (Botrytis)	Repeat application every 7-10 days if necessary. Do not mix this product with lime. Certain Vinifera and French Hybrid varieties may be sensitive to copper sprays resulting in marginal leaf burn. Before spraying these varieties, consult your State Experiment Station or make test sprays.
Hop	Anthracnose leaf and fruit spot, Cercospora leaf spot, Downy mildew, Powdery mildew	Repeat application every 10 days if necessary.
Lettuce, Chicory, Endive	Downy mildew, Septoria leaf spot, Powdery mildew, Bacterial soft rot and bottom rot	Repeat application every 7-10 days if necessary. Use lower rate when disease pressure is low or on copper sensitive varieties of lettuce.
Onion, Garlic, Leek, shallot, Chives	Botrytis leaf blight, Downy mildew, Neck rot, Bacterial soft rot	Repeat application every 7-10 days if necessary.
Parsley	Leaf scorch, Leaf spot	Repeat application every 7-10 days if necessary.
Peanuts	Sclerotinia blight, Leaf spots (early and late), web blotch	Repeat application every 7-10 days if necessary.
Pome Fruits (Apples, Pears, Quince)	Anthracnose, Cedar Apple Rust, Fireblight, Scab, Sooty Blotch, Flyspeck, Quince Rust	For fireblight control, apply this product in the dormant period, during bloom, or in-season cover spray applications. Do not exceed one application during the fall, late dormant period. Do not exceed one application between silver tip and green tip growth stages. May cause russeting of susceptible apple varieties. Do not exceed 1 gallon of product per 100 gallons of water. Repeat application every 7-10 days if necessary.

Crop	Diseases Controlled	Application Notes
Blackberry, Blueberry, Raspberry	Gray mold (Botrytis), Mucor fruit rot, Rhizopus fruit rot	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Stone Fruit Trees (Almond, Apricot, Cherry, Nectarine, Peach, Plum)	Bacterial canker (Pseudomonas syringae), Brown rot blossom blight, leaf and fruit spot, Bacterial leaf spot	For bacterial canker, apply as a dormant spray as buds begin to swell, repeating at the bud burst stage, and weekly thereafter as needed, up to six sprays. In the fall spray again at 10 and 80% leaf fall. For brown rot blossom blight apply full cover spray at delayed dormant (bud swell), popcorn, full bloom and petal fall stages. During wet weather additional bloom sprays may be necessary. Repeat application every 7-10 days as necessary.
	Anthracnose leaf and fruit spot, Coryneum blight, Peach leaf curl	Apply as a dormant spray in late fall to before bud break. Repeat application every 7-10 days if necessary.
Strawberry	Angular leaf spot, Leaf scorch, Mycosphaerella leaf spot, Phornopsis leaf blight, Powdery mildew, Septoria leaf spots	Spray 1 month after planting (or before flowering on established plants) and twice more at 7 to 10 day intervals.
	Anthracnose fruit rot, Gray mold (Botrytis)	Apply at the start of flowering and continue every 7 to 10 days until harvest.
Tobacco	Blue Mold (Downy Mildew)	Repeat application every 10 days if necessary.
Tomato, Potato, Eggplant, Pepper	Anthracnose leaf and fruit spot, Bacterial speck, Bacterial spot, Cercospora leaf spot, Early blight, Gray mold, Late blight, Leaf mold, Septoria leaf spot	Repeat application every 7-10 days if necessary.
Walnut	Blight	Repeat application every 7-10 days if necessary.

*Not registered for use in California

STORAGE AND DISPOSAL

Pesticide Storage: Store in a secure place, away from open fire or flame. Keep container closed and reseal after use. Product may be damaged by freezing. Do not store product below 4°C. If spilled, use absorbent materials and dispose of in an approved manner.

Pesticide Disposal and Container Handling: Nonrefillable container. Do not reuse or refill this container. *If empty:* 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.

FIRST AID

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 OR CLOTHING	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for 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 to an unconscious person

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information concerning this product, call the National Pesticide Information Center (NPIC) at 1-800-858-7378 Monday through Friday, 7:30 am to 3:30 pm (NPIC Web site: www.npic.orst.edu). During other times, call the poison control center 1-800-222-1222.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Environmental Hazards

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

NOTICE TO BUYER - Seller warrants that this product conforms to the chemical description on this label and is reasonably fit for purposes stated on this label only when used in accordance with directions under normal use conditions. This warranty does not extend to use of this product contrary to label directions, or under abnormal use conditions, or under conditions not reasonably foreseeable to seller. To the extent consistent with applicable law, buyer assumes all risk of any such use. Seller makes no other warranties, either expressed or implied.

Material Safety Data Sheet
May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be consulted
for specific requirements.

U.S Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

Bonide Liquid Copper Fungicide Ready To Use **ID No. 6770214**

Date: August 14, 2012

Section I

6301 Sutliff Road (315) 736-8231
Oriskany, NY 13424

Section II - Hazardous Ingredients/Identity

Hazardous Components (Specific Chemical Identity: Common Name(s)	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Copper Salts of Fatty Acids				.08%

CAUTION: May cause irritation of the mucous membranes. May be irritating to the eyes. Slight skin irritant. Excessive exposure, especially if prolonged, may produce skin irritation. May irritate existing skin conditions. Ingestion of copper salts may result in irritation of the gastrointestinal tract.

Section IV- First Aid Information

INHALATION: Remove victim to fresh air. Seek medical attention if irritation persists.
EYE CONTACT: Hold eyelids open and flush with water, until no evidence of chemical remains (at least 15-20 minutes). Seek medical attention if irritation persists.
SKIN CONTACT: Remove contaminated clothing and shoes. Wash with plenty of soap and water for 15-20 minutes until no evidence of chemical remains. Seek medical attention if irritation persists.
INGESTION: Do not induce vomiting. Consult with physician.

Section V - Firefighting Data

FLASHPOINT: NA FLAMMABLE LIMITS: ND
AUTOIGNITION TEMPERATURE: ND FIRE FIGHTING HAZARDS & PROCEDURES:
GENERAL HAZARD: No unusual fire or explosion hazards. Product is water based and generally non flammable.
EXTINGUISHING MEDIA: Water, Carbon dioxide or foam.
FIRE FIGHTING INSTRUCTIONS: Use normal firefighting procedures. Dike runoff.
FIRE FIGHTING EQUIPMENT: Wear protective clothing and self-contained breathing apparatus.
HAZARDOUS COMBUSTION PRODUCTS: Not available

Section VI – Accident Release Measures

SPILL OR LEAK PROCEDURES: Material is slippery when spilled. Soak up with a solid absorbent and collect for disposal. Small amounts may be flushed with water. Wear protective clothing. Cover spill with absorbent material such as sweeping compound or lime. Sweep up and place in an appropriate chemical waste container for disposal.

Section VII- Handling & Storage Information

HANDLING AND STORAGE PRECAUTIONS: Store in a clean, dry area. Store above 32 F. Keep this material out of the reach of children. Store away from food, feed and potable water. Always practice good hygiene when working with this or any chemical Wash thoroughly after handling, before smoking or eating. Wash contaminated clothing separately.

Section VIII- Personal Protection

RESPIRATORY PROTECTION: None known necessary.
EYE PROTECTION: Wear protective eyewear to prevent contact with this substance.
PROTECTIVE CLOTHING: None known to be necessary, but gloves may be worn when handling product.
VENTILATION: No special ventilation requirements are known necessary. Products should remain in unopened original container until used. Product is usually used outdoors. Do not intentionally breathe vapors.

Section IV - Physical/Chemical Ingredients

APPERANCE & ODOR: Blue liquid, fatty odor
PHYSICAL STATE: Liquid
pH: 5.7 – 6.1
SPECIFIC GRAVITY: ~ 1.
BOILING POINT (760 mm Hg): ~ 200-212 F, ~100° C
SOLUBILITY IN WATER: Dispersible in water.

Section X – Stability & Reactivity Data

STABILITY: Product is considered stable.
HAZARDOUS POLYMERIZATION: Will not occur
CONDITIONS TO AVOID: Avoid mixing with strong oxidizing agents or acids..
INCOMPATIBLE MATERIALS: None known
HAZARDOUS DECOMPOSITION: Carbon monoxide and carbon dioxide may form during burning.

Section XI - Toxicology Information

CHRONIC EFFECTS: None known

Section XII - Ecological Information

This product may be toxic to fish and aquatic organisms. Do not apply directly to water.

Section XIII - Disposal Information

DISPOSAL METHODS: Comply with appropriate disposal regulations.

Section XIV – Transportation Information

Non DOT Regulated.

KEEP OUT OF REACH OF CHILDREN

ABBREVIATION KEY

N/A: NOT AVAILABLE OR APPLICABLE
N/E: NOT ESTABLISHED
TLV: THRESHOLD LIMIT VALUE
TWA: TIME WEIGHTED AVG./8 HOUR WORKDAY
STEL: SHORT TERM EXPOSURE LIMIT
D.O.T.: DEPARTMENT OF TRANSPORTATION

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

MATERIAL SAFETY DATA SHEET

OHP, INC.
P.O. BOX 230, MAINLAND, PA 19451
800-659-6745

Rev. Date: 11/28/2005
Approval Date: 03/25/2004
Supercedes: 05/03/2002

TRANSPORTATION EMERGENCY
CHEMTREC . . . . . (800)-424-9300

EMERGENCY AND PRODUCT INFORMATION
OHP, Inc. . . . . (800)-356-4647

COMPASS™ O 50WDG

EPA Registration Number: 432-1371-59807

I. CHEMICAL PRODUCT INFORMATION

PRODUCT NAME . . . . . .: Compass O 50WDG
CHEMICAL FAMILY . . . . . : Strobilurin
CHEMICAL NAME . . . . . : Benzeneacetic acid, (E,E)-alpha-(methoxylmino)-2-((((1-(3-trifluoromethyl) phenyl)ethylidene)amino)oxy)methy)-,methyl ester
SYNONYMS . . . . . : Trifloxystrobin
EPA Registration No. . . . . : 432-1371-59807
PRODUCT USE . . . . . .: Fungicide

II. COMPOSITION / INFORMATION ON INGREDIENTS

Component Name /CAS No.	Concentration % by Weight Minimum	Maximum
Trifloxystrobin Technical 141517-21-7	48.5000	51.5000
Crystalline silica (originates from carrier) 14808-60-7		0.8330

III. HAZARDS IDENTIFICATION

NOTE: Please refer to Section XI for detailed toxicological information.

Emergency Overview . . : Caution! Causes moderate eye irritation. Harmful if absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling.

Physical State . . . . . : Solid granules
Odor . . . . . : Weak odor, indeterminate
Appearance . . . . . : Grey to Beige
Routes of Exposure . . . . : Inhalation, skin contact, skin absorption, eye contact.

IMMEDIATE EFFECTS

General . . . . . .: CARCINOGENICITY: This product is not listed as a carcinogen by NTP or IARC, or regulated as a carcinogen by OSHA. However, it may contain crystalline silica (quartz), a substance which is classified by NTP as a Group 2 carcinogen and by IARC as a Group I carcinogen. Crystalline silica is a naturally-occurring mineral component of many sands and clays. Although controversial, the carcinogenic potential of crystalline silica must be considered if it is inhaled under excessive exposure conditions. However, the respirable portion of the silica which may be contained in this product is small, such that excessive inhalation exposure during normal conditions of use is unlikely.

NTP: Crystalline silica is classified as an NTP Anticipated Human Carcinogen "Substances or groups of substances that may reasonably be anticipated to be carcinogens."

IARC: IARC has classified crystalline silica as a Group I carcinogen. "There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica (quartz) from occupational sources."

OSHA: Not regulated.

Eye . . . . . : Non-irritating
Skin . . . . . : Mildly toxic, Non-irritating. May cause an allergic reaction.
Ingestion . . . . . : Essentially non-toxic.

CHRONIC OR DELAYED

LONG-TERM . . . . . : This product contains respirable crystalline silica. Excessive long-term exposure to respirable crystaline silica may case silicosis, a form of progressive pulmonary fibrosis. Severe and permanent lung damage may result.

MEDICAL CONDITIONS

AGGRAVATED BY EXPOSURE: . . . : Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product. Pulmonary and respiratory diseases may be aggravated by exposure to respirable crystalline silica.

IV. FIRST AID MEASURES

Eye . . . . . : 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.

Skin . . . . . : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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

Inhalation. . . . . : Move 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 treatment advice.

Note to Physician . . . . . : If ingested, induce emesis or lavage stomach. Treat symptomatically.

V. FIRE FIGHTING MEASURES

Flash point . . . . . : Not applicable
Auto Ignition Temperature . . . . . : 320° C / 608° F
Suitable Exitinguishing Media. . . : Dry chemical, Foam, Carbon dioxide (CO_2)
Fire Fighting Instructions . . . . . : Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential

personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated.

VI. ACCIDENTAL RELEASE MEASURES

General and Disposal . . . . . : Do not walk through spilled material. Keep unauthorized people away.

Land Spill and Leaks . . . . . : Small Spill: Sweep up, keeping dust to a minimum, and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

VII. HANDLING AND STORAGE

Handling Procedures . . . . . : Handle and open container in a manner as to prevent spillage. Do not use, pour, spill or store near heat or open flame.

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

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizer, food and feed. Store in original container and out of the reach of children, preferably in a locked area.

Work/Hygienic Procedures . . . . . : Recommendations for eposure control / personal protection are intended for the manufacture, formulation and packaging of the product. For end-use applications consult the product label.

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

Remove clothing immediately if pesticide gets inside.

Then wash thoroughly and put on clean clothing.

Wash thoroughly with soap and water after handling.

VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls . . . . . : 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.

Eye/Face Protection . . . . . : Safety glasses with side-shields. Chemical goggles.

Hand Protection . . . . . : Chemical-resistant gloves made of waterproof material such as neoprene, butyl rubber, barrier laminate or nitrile rubber.

Body Protection . . . . . : Long-sleeved shirt and long pants. Shoes plus socks. Coveralls.

Respiratory Protection . . . . . : To avoid breathing dust, use a particulate filter, NIOSH approved per 42 CRF Part 84. Select N or R or P type as appropriate for the oil characteristics of any other air contaminates present. Filter efficiency may range from 95-99.97% as appropriate for the size distribution of dusts present.

General Protection . . . . . : Follow manufacture's instructions for cleaning / maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Do not enter treated areas without protective clothing until sprays have dried.

Exposure Limits . . . . . :

IX. PHYSICAL AND CHEMICAL PROPERTIES

Appearance . . . . . : Grey to Beige
Physical State . . . . . : Solid granules
Odor . . . . . : Weak odor, indeterminate
pH . . . . . : 9-11 (1% suspension in water)
Vapor Pressure . . . . . : 2.56E(-11)
Bulk Density . . . . . : 0.60 g/cm3 @ 25° C
Boiling Point . . . . . : No applicable
Melting / Freezing Point . . . . . : 70.9° C
Solubility (in water) . . . . . : 0.00061 g/1

X. STABILITY AND REACTIVITY

Chemical Stability . . . . . : This is a stable material.

Incompatibility . . . . . : Not known.

Hazardous Products of Decomposition . . . . . : None known.

Hazardous Polymerization (Conditions to Avoid) . . . . . : Will not occur.

XI. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity . . . . . : Male/Female Combined Rat: LD50: >5,050 mg/kg

Acute Dermal Toxicity . . . . . : Male/Female Combined Rat: LD50: > 2,000 mg/kg

Acute Inhalation Toxicity . . . . . : Male/Female Combined Rat: LC50: 4-hr exposure to dust: > 2.74 mg/1 (actual)

Male/Female Combined Rat: 1-hr exposure to dust (extrapolated from 4-hr LC50): > 10.96 mg/1 (actual).

Skin Irritation . . . . . : Rabbit: slight dermal irritant.

Eye Irritation . . . . . : Rabbit: Mild irritation to the cornea and conjunctiva was observed with all irritation clearing within 7 days post-treatment.

Sensitization . . . . . : Guinea pig: Not a dermal sensitizer.

Sub-Chronic Toxicity . . . . . : In a 28-day dermal toxicity study in rats, trifloxystrobin was tolerated without local effects at doses up to and including the limit dose of 1000 mg/kg/day. Systemic effects were observed in males at the limit dose and included increased organ weights (liver and kidney).

MATERIAL SAFETY DATA SHEET

COMPASS™ O 50WDG

EPA Registration Number: 432-1371-59807

Chronic Toxicity . . . . . : In chronic toxicity studies in mice and dogs, the major primary target organ appears to be the liver following dietary administration of trifloxystrobin. Liver effects were not seen in a chronic toxicity rat study with trifloxystrobin.

Assessment Carcinogenicity . . : Trifloxystrobin did not cause any treatment-related increase in general tumor incidence, any elevated incidence of rare tumors, or shortened time to the development of palpable or rapidly lethal tumors in an 18-month mouse and a 24-month rat study.

ACGIH	NTP	IARC	OSHA
None	None	None	None

Reproductive & Developmental Toxicity . . . . . : REPRODUCTION: In a two generation reproduction study using rats, trifloxystrobin was not a primary reproductive toxicant.

DEVELOPMENTAL TOXCITY: In a developmental toxicity studies using rats and rabbits, trifloxystrobin was not a primary developmental toxicant.

Mutagenicity . . . . . : Trifloxystrobin has been tested for its potential to induce gene mutation and chromosomal changes in 5 different test systems. Taken collectively, these studies demonstrate trifloxystrobin is not genotoxic or mutagenic.

XII. ECOLOGICAL INFORMATION

Environmental Precautions . . . . : This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal area below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Environmental Fate . . . . . : Ground Water Advisory: Several trifloxystrobin degradates have properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

XIII. DISPOSAL CONSIDERATIONS

General Disposal Guidance. . . . : Pesticide Disposal: Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal. . . . . : Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

RCRA Classification . . . . . :

XIV. TRANSPORT INFORMATION

TRANSPORTATION CLASSIFICATION: . . . .Not regulated for Transportation

XV. REGULATORY INFORMATION

RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

US Federal Regulations

EPA Registration No. . . . . : 432-1371-59807

TSCA list
None

TSCA 12b export notification
None

SARA Title III - section 302 - notification and information
None

SARA Title III - section 313 - toxic chemical release reporting
None

US States Regulatory Reporting

CA Prop65
This product does not contain any substances known to the state of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State right-to-know ingredients
None

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List
None

Environmental

CERCLA
None

Clean Water Section 307 Priority Pollutants
None

Safe Drinking Water Act Maximum Contaminant Levels
None

XVI. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
NFPA	1	1	0	

MSDS Revision: New EPA Registration Number, new format.
Approval Date: 03/25/2004
Supersedes Date: 05/03/2002

This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.

Compass is a registered trademark of Bayer AG. Bayer Environmental Science

ohp Partners with solutions

MSDS OHP 11/05

OHP, Inc., PO Box 230, Mainland, PA 19451


ohp
Partners
with
solutions

COMPASS® O 50WDG

FUNGICIDE SPECIMEN LABEL

For Control of Certain Foliar, Stem, and Root Diseases of Ornamentals Grown in Interiorscapes, Field Nursery Plantings, Forest Nurseries, Greeenhouses, Lath and Shadehouses, Containers, and Other Enclosed Structures.

FOR PROFESSIONAL USE ONLY.

ACTIVE INGREDIENT:	
Trifloxystrobin (CAS No. 141517-21-7)	50.0%
OTHER INGREDIENTS:	50.0%
TOTAL:	100.0%

COMPASS O is a water-dispersible granule.

EPA Est. indicated by second and third digits of the batch number on this package.

EPA Reg. No. 432-1371-59807 **(73) = 67545-AZ-1 (03) = 3125-MO-1 (98) = 33967-NJ-1**

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment

Applicators and other handlers must wear:

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

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

Engineering Control Statements

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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

FIRST AID	
If in eyes	• Hold eye 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 eye. • Call a poison control center or doctor for treatment advice.
If on skin or 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.
In case of emergency call toll free the OHP, Inc. Emergency Telephone No. 1-800-356-4657. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note to Physician: If ingested, induce emesis or lavage stomach. Treat symptomatically.	

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water or rinsate.

Ground Water Advisory

Several trifloxystrobin degradates have properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Net Contents: 1 pound (454 grams)

ohp Partners with solutions

PHYSICAL OR CHEMICAL HAZARDS
Do not use, pour, spill, or store near heat or open 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 (PPE) and restricted-entry interval. The requirements in this box only apply to uses on 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 12 hours. Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical-resistant gloves made of any waterproof material.
- Shoes plus socks

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 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 greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

Do not apply by aerial application in New York State

GENERAL INFORMATION

COMPASS® O is a modern site specific fungicide for use on ornamentals with protective and curative activity. **COMPASS O** penetrates the plant and provides translaminar activity via a high affinity for the waxy layer of the plant surface, localized vapor movement and re-deposition on the plant.

Mixing Procedures (Water Dispersible Granules)

Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Agitation is necessary for proper dispersal of the product. Maintain agitation throughout the spraying operation. Do not let the spray mixture stand overnight in the spray tank. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.

COMPASS O Alone: Add 1/2 of the required amount of water to the mix tank. With the agitator running, add the **COMPASS O** to the tank. Continue agitation while adding the remainder of the water. Begin application of the solution after **COMPASS O** has completely dispersed into the mix water. Maintain agitation until all of the mixture has been applied.

COMPASS O + Tank Mixtures: Add 1/2 of the required amount of water to the mix tank. Start the agitator running before adding any tank mix partners. In general, tank mix partners should be added in this order:

(1) products packaged in water-soluble packaging, wettable powders, wettable granules (dry flowables) such as **COMPASS O**; (2) liquid flowables, liquids; and (3) emulsifiable concentrates. Always allow each tank mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water. Maintain agitation until all of the mixture has been applied.

> **Note:** When using **COMPASS O** in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank mix partner, including **COMPASS O**. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank mix partner to the tank.

If using **COMPASS O** in a tank mixture, observe all directions for use, crop/sites, use rates, dilution ratios, precautions, and limitations that appear on the tank mix product label. No label dosage rate should be exceeded, and the most restrictive label precautions and limitations should be followed. This product should not be mixed with any product that prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are labeled.

COMPASS O is compatible with most insecticide, fungicide, and foliar nutrient products. However, the compatibility of **COMPASS O** with tank mix partners should be tested before use.

To determine biological compatibility with other products, mix the products in the desired proportions, spray on target plants and observe for phytotoxicity seven days after the application.

To determine the physical compatibility of **COMPASS O** with other products, use a jar test, as described below. Using a quart jar, add the proportionate amounts of the products to 1 qt. of water. Add wettable powders and water-dispersible granular products first, then liquid flowables, and emulsifiable concentrates last. After thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed readily, it is physically compatible. Once compatibility has been proven, use the same procedure for adding required ingredients to the spray tank.

Observe all directions, precautions, and limitations on labeling of all products used in tank mixes. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the referenced products are registered.

Use with additives: Use of spray additives are not required. Any spray additive should be evaluated prior to use. Do not use in conjunction with organosilicate-based products, or plant injury may occur. Label directions are based on data with no additives.

Chemigation: Do not apply this product through any type of irrigation system.

Resistance Management: COMPASS® O belongs to the strobilurin class of chemistry which exhibits no known cross-resistance to other chemical classes including sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines, or phenylamides. However, certain fungal pathogens are known to develop resistance to products used repeatedly. Because resistance development cannot be predicted, the use of this product should conform to resistance management strategies. Such strategies may include rotating and/or tank mixing with products having different modes of action; or limiting the total number of applications per season. OHP encourages responsible product stewardship to ensure effective long-term control of the fungal diseases on this label. See specific recommendations in the ornamentals section.

Maximum Use Rates

For plants grown in outdoor nurseries, outdoor seedbeds, field plantings, and landscapes up to 34 1/2 oz. of **COMPASS O** per acre of production per year or crop cycle can be used.

For seedlings and plants grown in greenhouses, containers, and other enclosed structures, up to 120 oz. of **COMPASS O** per acre per year or crop cycle can be used. In California only, do not apply more than 34 1/2 oz. of **COMPASS O** per acre per year or crop cycle to seedlings or plants grown in greenhouses, containers, and other enclosed structures.

ORNAMENTAL DISEASE CONTROL

COMPASS O is a broad-spectrum fungicide for the control of certain foliar, stem, and root diseases of ornamentals grown in interiorscapes, field nursery plantings, forest nurseries, greenhouses, lath and shadehouses, containers, and other enclosed structures.

Foliar Diseases: COMPASS O will control foliar diseases of ornamentals when applied as a foliar spray. Apply **COMPASS O** at 1 to 4 oz./100 gals. to the point of drip and repeat at 7 to 14 day intervals until the threat of disease is over. Start applications when conditions are favorable for disease development and continue until the threat of disease is over.

Damping off of New Seedlings: COMPASS O will control damping off of new seedlings caused by *Rhizoctonia solani* when applied as a drench to seedlings and transplants. Drench the growth media at a rate of 1/2 oz./100 gals. Repeat every 21 to 28 days. If *Pythium* spp. are also present, **COMPASS O** should be mixed with a Pythium control fungicide.

The plants that **COMPASS O** has been tested on, diseases that are controlled, and specific directions for use are listed in Tables 1, 2, and 3. Refer to Table 1 for information on ornamentals and diseases that have been evaluated, Table 2 for specific pathogens controlled, and to Table 3 for specific guidelines on the rates and timing of application.

Table 1. COMPASS O has been tested for phytotoxicity and been found safe to the following plants*. The numbers in ( ) indicate the diseases listed in Table 2. For plants not listed and for use of COMPASS O in tank mixtures, see Notice to Users.

Ajuga (2,11,12)
Aloe Vera (12)
Alyssum (7,12)
Apple, nonbearing** (11,13,14,15)
Aptenia (12)
Aster (11,12,13)
Azalea (2,5,11,12,13)
Azalea (Rhododendron) (2,10,11,12,13)
Bamboo (12,14)
Barberry, Japanese (4)
Begonia (5,11,12)
Bellis (1,2,5)
Betula (11,13)
Blue Daze (12)
Bottle Brush (14)
Brachycome (12)
Buddleia (butterfly bush) (8)
Camellia (2,5,12)
Campanula (Bell Flower) (11,12,13)
Caladium (12)
Cast Iron Plant (12)
Catnip (5,8,12)
Cedar (8,13)
Celosia (5,12)
Cherry, nonbearing** (11,14,15)
Chrysanthemum (5,8,12,13)
Citrus, nonbearing (11)
Coleus (5,12)
Coontie Palm (12)
Coreopsis (1,5,7,11,12)
Cosmos (11,12)
Crabapple, nonbearing** (8,11,13,14)
Daisy (12)
Dianthus (1,5,8,12,13)
Day Lily (8,12,13)
Delphinium (5,8,11,12)
Dieffenbachia spp. (9,10,12)
Digitalis (Foxglove) (7)
Dogwood (Cornus spp) (2,11)
Dracaena (8)
Dusty Miller (1,12)
Dwarf Ivy (12)
Euonymus (2,11)
Exacum (5)
Ficus (2,12)
Geranium (1,5,7,11,13)
Gerbera (caution on open flower) (2,5,11)
Grasses: list (2,8,11,13)
- Avena: Blue Grass
- Festuca Glauca: Blue Fescue
- Festuca Glauca: Sea Urchin
- Festuca Glauca: Elijah Blue
- Lagurus: Rabbit Tail
- Pampas Grass: Pink
- Pampa Grass: White
- Pennisetum Rubrum (Crimson Fountain Grass)
- Silver Banner Grass
- Variegated Ribbon Grass (Phalarispicta)

Hawthorn (5,8,14)
Hawthorn, Indian (8,12)
Heather, Mexican (12)
Hedera spp. (2,5,10,12)
Hen and Chickens, flowering (12)
Hibiscus (2,5,10,12)
Holly (Ilex) (4)
Hosta (5,12)
Hydrangea (11)
Hypericum (13)
Hypoestes (12)
Impatiens (1,7,12)
Indian Hawthorne (Raphiolepis) (8)
Iris (dwarf, Japanese, Siberian) (8,12)
Jasmine (2,12)
Juniperus tortulosm (12)
Lantana (12,13)
Lagerstroemia (Crape myrtle) (11)
Ligustrum (1,2,8,12)
Lilac (5,11,12)
Liriope (12)
Lupines (2,5,11,12)
Marigold (1,5,11,12)
Mint (11,13)
Monarda (Bee Balm) (5,11)
Moonflower (12)
Nandina (2,11)
Nectarine, nonbearing** (8,11,14,15)
Pansy* (1,2,5,7,8,11,12)
Peach, non-bearing** (5,12,15)
Penstemon (2,8,11)
Petunia (5,12)
Phlox (5,7,11)
Photinia (4,8,11)
Pittosporum (1,8,12)
Plum, non-bearing** (5,11,14)
Poinsettia (1,5,11,12,14)
Poppy (5)
Primula (Primrose) (5)
Prunus (2,5)
Rabbit's Foot Fern*** (5,12)
Ranunculus (7,11)
Photinia (Red Tip) (8)
Rose (3,5,6,7,11,12,13,14)
Pothos (9,10,12)
Salvia (1,5,7,11,12,13)
Snapdragon (2,5,7,8,11,12,13)
Spathiphyllum (6,9,10)
Spirea (11)
Syngonium (9,12)
Verbena (5,7,11,12)
Veronica (11)
Viburnum spp. (2,8,12)
Vinca (Catharanthus) (1,4,5,10,12)
Vinca Minor (2,10)
Zinnia (1,11)

Notes: * Do not drench Pansy.
** Do not apply **COMPASS O** to fruit trees that will bear harvestable fruit within 12 months of the last application.
*** Do not use **COMPASS O** on leatherleaf ferns.

Table 2. Common and scientific names of diseases controlled by COMPASS® O.

Common Name	Scientific Name
1. Alternaria (B)	*Alternaria* spp.
2. Anthracnose (B)	*Colletotrichum* spp.
3. Black Root (D)	*Thielaviopsis* spp.
4. Black Spot (B)	*Diplocarpon rosae*
5. Botrytis (B)	*Botrytis* spp.
6. Cylindrocladium (D)	*Cylindrocladium* spp.
7. Downy Mildew (A)	*Peronospora* spp.
8. Leaf Spot (B)	*Septoria* spp.
9. Myrothecium (A)	*Myrothecium* spp.
10. Phytopthora aerial (A)	*Phytopthora parasitica*
Phytopthora root (D)	
11. Powdery Mildew (A)	*Erysiphe* spp.
	Microsphaera spp.
	Oidium spp.
	Podoshpaera spp.
	Sphaerotheca spp.
12. Rhizoctonia stem / root rot (C)	*Rhizoctonia solani*
13. Rust (B)	*Gymnosporangium* spp.
	Phragmidium spp.
	Puccinia uromyces
14. Scab (B)	*Cladosporium* spp.
	Spaceloma
	Venturia inaequalis
15. Blossom Blight (E)	*Monilinia* spp.

Table 3. Specific use directions for selected pathogens.

A. Apply **COMPASS O** as a foliar spray at 1 to 2 oz. /100 gals. to the point of drip before disease is detected or when conditions are favorable for disease development. Continue at 7 to 14 day intervals until the threat of disease is over.

B. Apply **COMPASS O** as a foliar spray at 2 to 4 oz. /100 gals. to the point of drip before disease is detected or when conditions are favorable for disease development. Continue at 7 to 14-day intervals until the threat of disease is over. Under heavy pressure, use the highest rate and the shortest interval. Under light disease pressure, the application interval may be extended.

C. Apply 1/2 oz. /100 gals. as a drench to wet the upper 1/2 of the growing media. Start the application at the time of seedling, again at transplanting and at 21 to 28-day intervals thereafter.

D. Apply 1 to 2 oz. product /100 gals. as a drench to wet the upper 1/2 of the growing media. Start the application at the time of planting and at 14 to 28 days depending on disease pressure.

NOTICE TO USER: Plant tolerance to **COMPASS O** has been found to be acceptable on all it has been tested on. Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to **COMPASS O**. Neither the Manufacturer nor the Seller has determined whether or not **COMPASS O** can be used safely on ornamental plants not specified on this label. The professional user should determine if **COMPASS O** can be used safely prior to commercial use. In a small area test the recommended rates on a small number of plants for phytotoxicity prior to widespread use. Before using **COMPASS O** in tank mixture with other products, test the mixture on a small number of plants for phytotoxicity prior to widespread use.

Before using **COMPASS O** on plants for diseases that are not listed in the Directions for Use, test **COMPASS O** on a small scale first.

Resistance Management for Ornamentals

COMPASS O is a modern, site-specific fungicide belonging to the strobilurin class of chemistry. Fungal pathogens are known to develop resistance to fungicides with a specific mode of action. When site-specific fungicides are introduced without a clear resistance management strategy, resistance development may be rapid, particularly with greenhouse use.

COMPASS O exhibits cross-resistance to other strobilurins and fungicides within the **S**trobilurin **T**ype **A**ction and **R**esistance group (**STAR** compounds), but there is no known cross-resistance to fungicides of other classes including sterol inhibitors, dicarboximides, benzimidazoles, anilinopyrimidines, phenylpyrroles, or phenylamides.

Many fungi which attack ornamentals and flowering plants including Botrytis and powdery mildews have a history of fungicide resistance development. Because resistance development cannot be predicted, implementation of suitable strategies to manage the resistance risk to **COMPASS O** is needed. To minimize the risk of resistance development to **COMPASS O**, the following practices are recommended.

1. Use **COMPASS O** preventively.
2. For Leaf Spots and diseases other than Powdery Mildew, Downy Mildew, and Botrytis:
   A. Use no more than two (2) applications of **COMPASS O** before rotating to another effective product that is not in the strobilurin class of chemistry for two (2) applications before rotating back to **COMPASS O**.

      OR

   B. Rotate to another fungicide or nonstrobilurin chemistry after each **COMPASS O** application.
3. For Powdery Mildew, Downy Mildew, and Botrytis:
   A. Between each **COMPASS O** application, make two (2) applications of a fungicide of nonstrobilurin chemistry before rotating back to **COMPASS O**.

      OR

   B. Rotate to another fungicide of nonstrobilurin chemistry after each **COMPASS O** application
4. Make no more than four (4) foliar applications of **COMPASS O** per crop cycle or season for each at risk pathogen. Soil applications are independent of this limit.
5. Do not use **COMPASS O** for disease control in vegetables grown in greenhouses for crop production or in vegetable production of transplants for outdoor use.

Restrictions

1. For ground application, a minimum of 50 gals./A is recommended.
2. For aerial application, a minimum of 10 gals./A is recommended.
3. To avoid spray drift, do not apply when conditions favor drift beyond the target area. Avoid spray overlap.
4. For information on spray equipment and calibration, consult sprayer manufacturers and state recommendations. For specific local directions and spray schedules, consult the current state agricultural experiment station recommendations.
5. Use of spray additives are not required. Any spray additive should be evaluated prior to use. Do not use in conjunction with organosilicate-based products, or plant injury may occur. Label directions are based on data with no additives.

Maximum Use Rates in Ornamentals

1. For plants grown in outdoor nurseries, outdoor seedbeds, field plantings, and landscapes, up to 34 1/2 oz. of **COMPASS® O** per acre of production or acre of landscape per year or crop cycle can be used.
2. For seedlings and plants grown in greenhouses, containers, and other enclosed structures, up to 120 oz. of **COMPASS O** per acre per year or crop cycle can be used. In California only, do not apply more than 34 1/2 oz. of **COMPASS O** per acre per year or crop cycle to seedlings and plants grown in greenhouses, containers, and other enclosed structures.
3. For foliar applications, do not apply more than 8 oz. of **COMPASS O** per acre per application.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed below. In spill or leak incidents, keep unauthorized people away. The OHP, Inc.'s Emergency Response Telephone No. is 800-356-4647 or contact Chemtrec at 800-424-9300.

PESTICIDE DISPOSAL: Pesticide wastes may be toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

CONTAINER DISPOSAL: 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.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond OHP's control it is impossible for OHP to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user of buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, OHP, INC. MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of OHP, Inc. is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, OHP, Inc. disclaims any liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT OHP, INC.'S SELECTION, THE REPLACEMENT OF PRODUCT.

Compass is a registered trademark of Bayer AG.

Manufactured for:
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ESL011907N REV062908
OHP 981554

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with
solutions

Specimen Label

Dow AgroSciences™

Eagle® 20EW

Specialty Fungicide

®Trademark of Dow AgroSciences LLC

A systemic, protectant and curative fungicide for disease control in established turfgrass, landscape ornamentals, greenhouse and nursery ornamentals, apples, stone fruits and grapes

Group	3	FUNGICIDE

Active Ingredient
myclobutanil: a-butyl-a-(chlorophenyl)-1H-1,2,4,triazole-1-propanenitrile 19.7%
Other Ingredients 80.3%
Total 100.0%

Contains petroleum distillates
Contains 1.67 lb of active ingredient per gallon

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-463

CAUTION

First Aid

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 swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.
If on skin or on clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Note to Physician: This product may pose an aspiration pneumonia hazard. Contains petroleum distillates.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-992-5994 day or night, for emergency treatment information.

Causes Moderate Eye Irritation • Harmful If Swallowed Or Absorbed Through Skin

Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

Personal Protective Equipment (PPE)

WPS Uses: Applicators and other handlers who handle this pesticide for any use covered by the Worker Protection Standard (40 CFR Part 170) must wear:
- Long-sleeved shirt and long pants
- Chemical-resistant gloves made from barrier laminate
- Shoes plus socks

Non-WPS Uses: Applicators and other handlers who handle this pesticide for any use NOT covered by the Worker Protection Standard (40 CFR Part 170) must wear:
- Long-sleeved shirt and long pants
- Shoes plus socks

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

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.

Engineering Controls

When handlers use closed systems, enclosed cabs or aircraft in a manner that meet the requirements listed in the Worker Protection Standards (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Environmental Hazards

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 areas treated.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Read all Directions for Use carefully before applying.

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 (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:
- Coveralls
- Chemical-resistant gloves made from any waterproof material
- Shoes plus socks

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 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 greenhouses.

Keep unprotected persons out of treated area until sprays have dried.

Storage and Disposal

Do not contaminate water, food or feed by storage or disposal.
Pesticide Storage: Store in a cool, dry area above freezing.
Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Nonrefillable containers 5 gallons or less:
Container Handling: Nonrefillable container. Do not reuse or refill this container.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for

Storage and Disposal (Cont.)

10 seconds after the flow begins to drip. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Refillable containers 5 gallons or larger:
Container Handling: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Nonrefillable containers 5 gallons or larger:
Container Handling: Nonrefillable container. Do not reuse or refill this container.
Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

General Information

Shake Well Before Using

Eagle® 20EW specialty fungicide is a systemic, protectant and curative fungicide for the control of the diseases listed on this label in established turfgrass (including residential and commercial lawns, ornamental turfgrass, grounds or lawns around business and office complexes, and golf course fairways, roughs, tee boxes, and greens), landscape ornamentals, greenhouse and nursery ornamentals, and non-commercial tree fruits and vines, specifically apples, stone fruits and grapes. Optimum disease control is achieved when this product is applied in a regularly scheduled preventive program.

General Use Precautions

Fungicide Resistance Management
Eagle 20EW belongs to the sterol demethylation inhibitor (DMI) class of fungicides and is classified as a Group 3 fungicide by EPA. Since certain fungi can develop resistance to this class of products, the use of Eagle 20EW should be part of a resistance management strategy that includes alternation and/or tank mixing with fungicides of different modes of action. After two consecutive applications of Eagle 20EW, another myclobutanil product, or another DMI, rotate to a product that is effective on the target pathogen and has a mode of action different from Eagle 20EW. Apply the alternate products within the intervals specified on the label for Eagle 20EW. Do not apply Eagle 20EW at rates below those specified on the label. If tank mixing, use the full label rate of Eagle 20EW with the full label rates of other products effective on the target pest. Consult your local or state agricultural authorities for resistance management strategies that are appropriate for your disease management program.

The following practices can delay development of fungicide/bactericide resistance:

- Avoid the consecutive use of Eagle 20EW or other target site of action Group 3 fungicides/bactericides that have a similar target site of action on the same pathogens.
- Use tank mixtures or premixes with fungicides/bactericides from different target site of action groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern.
- Base fungicide/bactericide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitor treated fungal/bacterial populations for loss of field efficacy.
- Contact your local extension specialist, certified crop advisors, and/or manufacturer for fungicide/bactericide resistance management and/or IPM recommendations for specific crops and resistant pathogens.
- For further information or to report suspected resistance, you may contact your local Dow AgroSciences representative or by calling 800-258-3033.

Mixing Directions

Be sure sprayer is clean and not contaminated with other materials prior to use. Fill the spray tank 1/4 to 1/2 of the total amount of water required for the load. Start agitation and maintain agitation throughout mixing and application. Add the required amount of Eagle 20EW directly into the spray tank. Complete filling the tank. Always add Eagle 20EW to the spray tank before adding other materials.

Compatibility
Eagle 20EW is compatible with most commonly used fungicides, insecticides, growth regulators, micronutrients and spray adjuvants. When preparing tank mixes, consult spray compatibility charts or State Cooperative Extension Service Specialist prior to use. When an adjuvant is to be used with this product, Dow AgroSciences recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Application Directions

Carefully read, understand and follow label use rates and restrictions. For proper application, determine the size of the area to be treated, the specified label use rate and the gallonage to be applied to the area. Under low disease conditions, minimum label use rates per application can be used. Use maximum label rates and shortened spray schedules for severe or threatening disease conditions. Prepare only the amount of spray solution required to treat the measured area. Careful calibration of spray equipment is recommended prior to use.

Ground Application
Thorough coverage sprays generally result in optimum disease control. Application equipment must be properly calibrated and provide uniform spray coverage.

Handgun or Pressurized Sprayers: For best results when applying this product on a protectant schedule, ensure thorough coverage of all plant parts.

Chemigation Application
Eagle 20EW must be applied on a regular protectant fungicide schedule, *not an irrigation schedule*. If irrigation cycles are less frequent than the application intervals for Eagle 20EW, ground or handgun applications must supplement chemigation applications to achieve adequate disease control.

Directions for Sprinkler Chemigation: Apply this product only through solid set or hand-move sprinkler irrigation systems. Do not apply this product through any other type of irrigation system.

Chemigation Equipment Preparation: The following use directions are to be followed when this product is applied through irrigation systems. Thoroughly clean the chemigation system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injection system with soap or a cleaning agent and water. Determine the amount of Eagle 20EW needed to cover the desired area. Mix according to instructions in the Mixing Directions section. Continually agitate the mixture during mixing and application.

Chemigation Equipment Calibration: In order to calibrate the irrigation system and injector to apply the mixture containing Eagle 20EW, determine the following: 1) Determine area covered by sprinkler; 2) Fill injector solution tank with water and adjust flow rate to use the contents over a 10- to 30-minute interval; (3) Determine the amount of Eagle 20EW required for treatment area; 4) Add the required amount of Eagle 20EW into the same quantity of water used to calibrate the injection equipment. Maintain constant solution tank agitation during the injection period. Operate system at normal pressures specified by the manufacturer of the injection equipment and used for the time interval established during calibration. Inject Eagle 20EW at the end of an irrigation cycle or as a separate application to maximize foliar absorption and retention. Stop injection equipment after treatment is completed. Continue to operate the system until the solution with Eagle 20EW has cleared the last sprinkler head.

Chemigation Equipment Requirements:

- The system must contain an air gap, an approved backflow prevention device, a functional check valve, vacuum relief valve (including inspection port), and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow. Refer to the American Society of Agricultural Engineer's Engineering Practice 409 for more information or state specific regulations.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 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.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 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.
- To insure uniform mixing of the fungicide in the water line, inject the mixture in the center of the pipe diameter or just ahead of an elbow or tee in the irrigation line so that the turbulence created at those points will assist in mixing. The injection point must be located after all backflow prevention devices on the water line.
- The tank holding the fungicide mixture should be free of rust, fertilizer, sediment, and foreign material, and equipped with an in-line strainer situated between the tank and the injector point.

Chemigation Precautions:

- Crop injury, lack of fungicidal effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.
- If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.
- Public water system means a system for the provision to the public of piped water for human consumption if such system that 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.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person shall operate the system and make necessary adjustments should the need arise and continuously monitor the injection.

Chemigation Restrictions:

- Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone (RPZ), back flow preventer 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 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.
- The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection.
- 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.
- 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.
- 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.
- Do not connect an irrigation system used for pesticide application (including greenhouse systems) to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place with current certification. Specific local regulations may apply and must be followed.
- Do not apply when wind speed favors drift beyond the area intended for treatment. End guns must be turned off during the application if they irrigate nontarget areas.
- Do not allow irrigation water to collect or run off and pose a hazard to livestock, wells, or adjoining crops.
- Do not enter treated area during the reentry interval specified in the Agricultural Use Requirements section of this label unless required PPE is worn.
- Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

Uses

Established Turfgrass

Use Eagle 20EW in conjunction with turf management practices that promote good plant health and optimum disease control. The key to selecting a fungicide is the proper diagnosis of the organism causing the disease. Use diagnostic kits, extension experts, or other identification methods when developing disease control strategies.

In non-residential turfgrass (including commercial lawns, ornamental turfgrass, grounds or lawns around business and office complexes, and golf course fairways, roughs, tee boxes, and greens), optimum disease control is achieved when Eagle 20EW is applied in a preventative disease control program at a rate of 1 to 2.4 fl oz per 1000 sq ft. In residential turfgrass, optimum disease control is achieved when Eagle 20EW is applied in a preventative disease control program at a rate of 1.2 fl oz per 1000 sq ft. See the tables below for specific application rates for various diseases.

Apply Eagle 20EW in sufficient water to ensure thorough coverage. For foliar diseases, use approximately 1 gallon of water per 1000 sq ft. Use 2 to 3 gallons of spray solution per 1000 sq ft to control diseases causing root and crown rots. Under conditions favorable for high disease development, reduce the spray interval between applications of Eagle 20EW. Under light to moderate disease pressure, apply Eagle 20EW at the low use rate and/or longer treatment interval. When disease pressure is high or when used as a curative treatment, use higher rates of Eagle 20EW and/or shorter treatment interval unless otherwise specified.

Non-Residential Turfgrass[1]

Diseases	Eagle 20EW (fl oz/1000 sq ft)	Application Interval/ Timing (Days)	Directions	Restrictions
anthracnose red thread septoria leaf spot	1.2	14 - 21	Apply when conditions are favorable for disease development.	• Do not apply more than 13.8 fl oz of Eagle 20EW per 1000 sq ft per year. • For Nassau and Suffolk Counties in New York State, do not apply more than 3.43 fl oz of Eagle 20EW per 1000 sq ft per year (1.95 lb myclobutanil per acre).
brown patch		14	Begin applications when conditions are favorable for disease development, but before disease symptoms are apparent. If disease is present, mix Eagle 20EW with an EPA registered contact fungicide, such as Fore® T/O fungicide. Under conditions of high temperature and humidity, use the shorter spray interval.	
copper spot zonate leaf spot			Apply when conditions are favorable for disease development.	
crown rot leaf spot melting-out				
dollar spot	0.5	7	Apply when conditions are favorable for disease development.	
		14	Tank mix with a low label rate of chlorothalonil.	
	1	21 – 28	Tank mix with the label rate of chlorothalonil.	
	1 – 2.4	14 – 28	If using this rate without tank mixing, make no more than 3 consecutive applications for dollar spot control before rotating to a registered fungicide with a different mode of action.	
fusarium blight	1.2 - 2.4	14 - 21	Apply when conditions are favorable for disease development.	
fusarium patch (pink snow mold)		fall - winter	Apply prior to snow cover.	
gray leaf spot	1.2 – 2.4	14	Apply when conditions are favorable for disease development. If using the lower rate, tank mix with a registered contact fungicide at its specified rate.	
leaf smuts	1.2		Apply in the fall after turfgrass enters dormancy and/or in the spring prior to the initiation of growth.	
necrotic ring spot	1.2 - 2.4	spring: 28	Make applications on a preventative basis in early to mid-spring.	
		fall: 28	Make 2 applications beginning in August before the turfgrass goes dormant. Apply 2.4 fl oz per 1000 sq ft followed by a second application one month later.	
powdery mildew rusts	1.2	14 - 28	Apply when conditions are favorable for disease development.	
spring dead spot	2.4	fall: 28	Make 1 to 2 applications in the fall before turfgrass dormancy. Make a second application one month later.	
summer patch	1.2 - 2.4	14 - 28	Begin applications in the spring when conditions are favorable for disease development. Make 2 to 4 applications depending upon recommendations from local turfgrass extension experts. Use at least 2 to 3 gallons of water per 1000 sq ft to increase spray penetration to crown and roots.	
take-all patch	2.4	spring/fall: 28	To reduce the severity, make 1 to 2 fall applications in September and October or when night temperatures drop to 55°F, and 1 to 2 spring applications in April and May depending upon local recommendations.	
zoysia large patch		fall: 28	Make applications in fall before turfgrass dormancy.	

[1]Including commercial lawns, ornamental turfgrass, grounds or lawns around business and office complexes, and golf course fairways, roughs, tee boxes, and greens.

Residential Turfgrass

Disease	Eagle 20EW (fl oz/1000 sq ft)	Application Interval/ Timing (Days)	Directions	Restrictions
anthracnose red thread septoria leaf spot	1.2	14 - 21	Apply when conditions are favorable for disease development.	• Do not apply more than 13.8 fl oz of Eagle 20EW per 1000 sq ft per year. • For Nassau and Suffolk Counties in New York State, do not apply more than 3.43 fl oz of Eagle 20EW per 1000 sq ft per year (1.95 lb myclobutanil per acre).
brown patch		14	Begin applications when conditions are favorable for disease development and before disease symptoms are apparent. If disease is present, mix Eagle 20EW with an EPA registered contact fungicide, such as Fore® T/O fungicide. Under conditions of high temperature and humidity, use the shorter spray interval.	
copper spot zonate leaf spot			Apply when conditions are favorable for disease development.	
crown rot leaf spot melting-out				
dollar spot			Apply when conditions are favorable for disease development. Make no more than 3 consecutive applications for dollar spot control before rotating to a registered fungicide with a different mode of action.	
fusarium blight			Apply when conditions are favorable for disease development.	
fusarium patch (pink snow mold)		fall - winter	Apply prior to snow cover.	
gray leaf spot		14	Apply when conditions are favorable for disease development.	
leaf smuts		14	Apply in the fall after turfgrass enters dormancy and/or in the spring prior to the initiation of growth.	
necrotic ring spot		spring: 28	Make applications on a preventative basis in early to mid-spring.	
		fall: 28	Make 2 applications beginning in August before the turfgrass goes dormant.	
powdery mildew rusts		14 - 28	Apply when conditions are favorable for disease development.	
summer patch		14	Begin applications in the spring when conditions are favorable for disease development. Make 2 to 4 applications depending upon recommendations from local turfgrass extension experts. Use at least 2 to 3 gallons of water per 1000 sq ft to increase spray penetration to crown and roots.	

Landscape, Greenhouse and Nursery Ornamentals

Eagle 20EW is a locally systemic fungicide having protectant and curative properties that will translocate to new growth. For best control of labeled diseases, achieve thorough coverage of all plant parts on a protective application schedule. For dilute application sprays (≥100 gallons of spray volume per acre) applied to ornamental plants in greenhouses, field grown plantings or in commercial and residential landscapes, apply Eagle 20EW at the rate of 6 to 12 fl oz per 100 gallons of spray volume on a 10- to 14-day application schedule unless otherwise directed. Use the higher rate under conditions of high disease pressure and/or optimum conditions for infection.

For concentrate sprays (<100 gallons of spray volume per acre), apply 8 fl oz per acre on a 10- to 14-day application schedule.

The addition of a non-phytotoxic spray adjuvant will improve spray coverage and fungicidal performance. Maintain treated plants in a vigorous growing condition. Plants under nutritional or water stress will not respond as well to treatment as well-maintained plants. Overdosage of Eagle 20EW can result in observable foliar greening, thickened leaves, and/or shortened internodes. If this condition is observed, reduce the fungicide use rate but do not extend the application schedule.

Crop Tolerance
Plant tolerances are acceptable in the specific plants listed on this label. It is not possible to evaluate all ornamental plant species or varieties for tolerance to Eagle 20EW. The user should test for possible phytotoxic responses by treating a limited number of plants, at specified use rates, prior to initiating large-scale use.

The effects of spraying Eagle 20EW in combination with plant growth regulators are not fully understood at this time. If the use of a plant growth regulator is planned in an area being treated, the user should test for possible enhanced growth regulatory effects by treating a small number of plants, at the specified use rates of all products, prior to initiating large-scale use. Since the effectiveness of such products depends upon not just plant species or cultivar but also weather and seasonable differences (e.g., daylight hours), it is recommended that tests be repeated on previously tested varieties as environmental factors change and that observations for growth regulatory responses be made at regular intervals.

Specific Use Directions for Chrysanthemum
Foliar Sprays: Best control is achieved by thorough coverage sprays applied to point of runoff on a protectant application schedule. Use Eagle 20EW at a rate of 8 fl oz per 100 gallons of spray mixture. Do not apply more than 19 fl oz of Eagle 20EW (0.25 lb myclobutanil) per acre per application. Apply on a 10- to 14-day schedule (not to exceed 21 days).

Prestick Dip Treatment: Chrysanthemum cuttings may be treated by a dip procedure prior to planting as follows: Prepare a dip suspension at a concentration equivalent to 8 fl oz of Eagle 20EW per 100 gallons of water. Fully submerge cuttings in the dip suspension until wet throughout (do not submerge cuttings for more than 2 minutes). If cuttings are dipped, this procedure is the first spray under the quarantine program. Dispose of

used dip suspension if it becomes contaminated with soil, plant debris or other foreign matter. Dispose of used dip suspension by spraying it onto registered crops (but not onto previously dipped cuttings) after filtering, or in a manner consistent with local, state, and federal guidelines.

Note: All infected plant material must be destroyed if your state is under quarantine directive.

Specific Use Restrictions:

- Do not apply more than 20 fl oz of Eagle 20EW (0.25 lb myclobutanil) per acre per application. On a total volume per acre basis, do not apply more than 333 gallons of spray per acre at the 6 fl oz per 100 gallons rate or 167 gallons per acre at the 12 fl oz per 100 gallons rate per application.
- Do not apply more than 153 fl oz of Eagle 20EW (2 lb myclobutanil) per acre per year.
- Do not use treated plant materials for food or feed.
- Do not apply to landscape, greenhouse and nursery ornamentals in Nassau and Suffolk Counties in New York State.
- Do not apply to carrotwood (*Cupaniopsis anacardioides*).

Crops	Diseases	Directions	Precautions/Restrictions
abelia	cercospora leaf spot powdery mildew		
acalypha (copper-leaf)			
achillea (yarrow)	powdery mildew rust		
African violet	powdery mildew		
ageratum	powdery mildew rust		
alder			
almond, flowering	blossom blight (*Monilinia* spp.)	Apply prebloom, 50% bloom and at petal fall.	
amelanchier (juneberry, shadbush)	fabraea leaf spot powdery mildew rust		
amorpha (false indigo)	cercospora leaf spot powdery mildew rust		
anemone	rust		
angelica	cercospora leaf spot rust		
ash	rust		
aster	powdery mildew rust		
Australian pine	diplodia tip blight		
azalea	petal blight (*Ovulinia* spp.) powdery mildew	Begin applications when flowers start to exhibit color.	
barberry	powdery mildew rust		May cause temporary damage to crimson pigmy and other atropurposis varieties.
begonia	powdery mildew		
bellflower	cercospora leaf spot powdery mildew rust		
birch	rust		
bittersweet	powdery mildew		
buckeye			
buttonbush	cercospora leaf blight powdery mildew rust		
calendula	cercospora leaf spot		
California poppy	powdery mildew		
canna lily	rust		
carnation	powdery mildew rust		
catalpa	cercospora leaf spot powdery mildew		
cherry, flowering	leaf spot powdery mildew		
chestnut, horse	powdery mildew		
China aster	rust		
chokeberry	rust twig and fruit blight		Fruit may not be used for food or feed.
Christmas trees	rust		
chrysanthemum	ascochyta blight rust white rust		
columbine	rust		
cornflower			
cosmos	powdery mildew		
cottonwood			
crabapple, flowering	powdery mildew rust scab		
crepe-myrtle	powdery mildew		
daffodil	rust		

Crops (Cont.)	Diseases	Directions	Precautions/Restrictions
dahlia	powdery mildew		
delphinium	powdery mildew rust		
dogwood	anthracnose powdery mildew septoria leafspot		
Douglas fir	needle rust	Apply 12 to 18 fl oz per acre starting early spring. Continue applications at 2- to 3-week intervals until the threat of infection has passed. Spray adjuvants must be added to spray solutions to obtain good spray coverage and disease control.	
dianthus	rust		
elm	powdery mildew		
euonymus			
fern	rhizoctonia aerial blight		
fleabane	cercospora leaf spot powdery mildew rust		
four o'clock	rust		
fuchsia			
gaillardia	powdery mildew rust		
gardenia			
geranium			
gerbera daisy	powdery mildew		
gourd, ornamental			
grape leaf ivy			
hackberry	cercospora leaf spot powdery mildew		
hawthorn	fabraea leaf spot powdery mildew rust scab		
hibiscus	powdery mildew		
holly	powdery mildew		
hollyhock	powdery mildew rust		
honeysuckle	cercospora leaf spot powdery mildew		
hydrangea	cercospora leaf spot		
iris	didymellina leaf spot rust	Apply 12 fl oz per 100 gallons of spray solution.	
juniper	rust		
leucothoe	cercospora leaf spot		
leyland cyprus	cercospora leaf spot		
lilac	powdery mildew		
loblolly pine	fusiform rust	Refer to Douglas fir	
locust	powdery mildew		
maple			Do not use treated trees for syrup production. Do not apply to abutilon (flowering maple).
marigold	cercospora leaf spot rust		
mock-orange	powdery mildew rust		
moonflower	rust		
mountain laurel	cercospora leaf spot ovulinia petal blight powdery mildew	Refer to azalea	
nephthytis	cephalosporium leaf spot		
ninebark	rust		
oak	powdery mildew		
pansy	powdery mildew rust		
pear, flowering	powdery mildew rust scab		
petunia	powdery mildew rust		
phlox	cercospora leaf spot powdery mildew rust		

Crops (Cont.)	Diseases	Directions	Precautions/Restrictions
photinia	entomosporium leaf spot powdery mildew rust		
poinsettia	poinsettia scab powdery mildew		
poplar	rust		
potentilla			
privet	cercospora leaf spot powdery mildew		
pyracantha (firethorn)	fusicladium scab		
quince, flowering	blossom and twig blight cercospora leaf spot fabraea leaf spot rust		
rhododendron	cercospora leaf spot ovulinia petal blight powdery mildew	Refer to azalea	
rose	black spot powdery mildew rust	Apply on a 7- to 10-day protectant schedule. In areas where black spot is not a problem, spray intervals may be increased to a maximum of 14 days. Greenhouse rose varieties vary in their sensitivity to Eagle 20EW. User should evaluate for possible abnormal response by treating a limited number of plants, at specified rates, prior to initiating large-scale use.	
Russian olive	cercospora leaf spot rust		
salvia	powdery mildew rust		
sedum	powdery mildew		
slash pine	fusiform rust	Refer to Douglas fir	
smoke-tree (cotinus)	cercospora leaf spot rust		
snapdragon	powdery mildew rust		
spirea	powdery mildew		
sunflower	cercospora leaf spot powdery mildew rust		Seeds from treated plants may not be used for food or feed.
sycamore	powdery mildew		
trumpet creeper	cercospora leaf blight powdery mildew		
viburnum	powdery mildew rust		
walnut	powdery mildew		Do not use nuts from treated trees for food purposes.
willow			
zinnia	cercospora leaf spot powdery mildew		

Home Orchards, Vineyards, or Fruit Trees

Best control of labeled diseases is achieved when Eagle 20EW is applied on a 7- to 10-day protectant schedule. Eagle 20EW is a systemic fungicide and does not redistribute after application. Adjust application equipment spray nozzles to apply a uniform spray throughout the entire tree canopy.

Dilute (thorough coverage) applications are based upon the amount of spray solution required to thoroughly wet plants to the point of run-off. Refer to use directions for specific tree fruits and vines to determine actual use rate per 100 gallons of spray for control of labeled diseases. The following specific use directions are based on a dilute spray volume of 300 gallons per acre.

Apple

Diseases	Eagle 20EW (fl oz/100 gallons)	Directions	Restrictions
powdery mildew (*Podosphaera* spp.)	4 - 6	Begin application at tight cluster and continue through the second cover spray. Additional sprays beyond second cover may be needed on susceptible varieties or under heavy disease pressure. Use high rate if powdery mildew was present in previous years.	• **Preharvest Interval:** Do not apply within 14 days of harvest. • Do not apply more than 153 fl oz of Eagle 20EW (2 lb myclobutanil) per acre per season.
rusts (*Gymnosporangium* spp.)		Begin applications at pink stage and continue through the second cover spray.	
scab (*Venturia* spp.) prebloom		Begin application at green tip or when environmental conditions become favorable for primary scab development. Apply Eagle 20EW alone or tank mixed with a protectant fungicide on a 7- to 10-day schedule.	
bloom, postbloom		Use Eagle 20EW in a tank mixture with the specified rate of a protectant fungicide, registered for use on apples, for improved fruit scab and summer disease control.	
post-infection	6	Eagle 20EW provides 96-hour post-infection control or curative activity. Apply as soon as possible after infection period. Follow with a standard preventative spray schedule.	

Grape

Thorough spray coverage is essential for good disease control. Apply Eagle 20EW in sufficient spray volume to ensure complete and uniform coverage.

Diseases	Eagle 20EW (fl oz/acre)	Directions	Restrictions
anthracnose (*Elsinoe* spp.)	6 - 10	Begin application when new shoots are 1 to 3 inches in length. Reapply on a protectant schedule that does not exceed 14 days.	• **Preharvest Interval:** Do not apply within 14 days of harvest. • Do not apply more than 46 fl oz of Eagle 20EW (0.6 lb myclobutanil) per acre per year.
black rot (*Guignardia* spp.)		**Preventative Schedule**: Begin application when new shoots are 1 to 3 inches in length. Reapply on a protectant schedule that does not exceed 14 days. Use a higher rate under heavy disease pressure. **Post-infection Schedule**: Apply within 72 hours after the beginning of an infection period.	
powdery mildew (*Uncinula* spp.)		Begin application at prebloom (12- to 18-inch shoots) and do not extend applications beyond a 21-day interval. Use a higher rate or shorter spray interval on susceptible varieties or under heavy disease pressure.	

Stone Fruits

Crops	Diseases	Eagle 20EW (fl oz/100 gallons)	Directions	Restrictions
apricot	brown rot blossom blight (*Monilinia* spp.)	2 - 3	Begin application at early red bud stage before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.	• Do not apply more than 84 fl oz of Eagle 20EW (1.1 lb myclobutanil) per acre per season. • Applications may be made up to the day of harvest.
	brown rot (*Monilinia* spp.)		Apply 12 fl oz (0.16 lb myclobutanil) per acre on a 7- to 14-day protectant schedule. Apply when environmental conditions favor disease development during the month prior to harvest.	
	powdery mildew (*Podosphaera* spp.)		Follow brown rot blossom blight schedule. Reapply at 10- to 14-day intervals until terminal growth ceases.	
	shothole (*Stigmina* spp.)		Follow brown rot blossom blight schedule. Reapply at 7- to 10-day intervals as long as needed.	
cherries	brown rot blossom blight (*Monilinia* spp.)		Begin application at early popcorn stage, before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.	• Do not apply more than 100 fl oz of Eagle 20EW (1.3 lb myclobutanil) per acre per season. • Applications may be made up to the day of harvest.
	brown rot (*Monilinia* spp.)		Refer to apricot	
	powdery mildew (*Podosphaera* and *Sphaerotheca* spp.)			
	leaf spot (*Blumeriella* spp.)		Follow the brown rot blossom blight schedule. Reapply at 7- to 10-day intervals. Make additional applications after harvest.	
nectarine	brown rot blossom blight (*Monilinia* spp.)		Begin application at early pink bud stage before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.	
	brown rot (*Monilinia* spp.)		Refer to apricot	
	powdery mildew (*Podosphaera* and *Sphaerotheca* spp.)			
	shothole (*Stigmina* spp.)		Follow brown rot blossom blight schedule, Reapply at 7- to 10-day intervals as long as needed.	
peach	brown rot blossom blight (*Monilinia* spp.)		Begin application at early pink bud stage before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.	
	brown rot (*Monilinia* spp.)		Refer to apricot	
	powdery mildew (*Podosphaera* spp.)			
	rust (*Tranzschelia* spp.)		Apply 12 fl oz (0.16 lb myclobutanil) per acre. Begin application approximately 8 weeks after flowering if environmental conditions are favorable for disease development. For optimum disease control, do not apply on a protectant schedule exceeding 21 days.	
plum prune	brown rot blossom blight (*Monilinia* spp.)		Begin application at green tip before infection occurs. If conditions are favorable for disease development, reapply at full bloom and petal fall.	• Do not apply more than 84 fl oz of Eagle 20EW (1.1 lb myclobutanil) per acre per season. • Applications may be made up to the day of harvest.
	rust (*Tranzschelia* spp.)		Refer to peach	

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitations of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

Limitation of Remedies

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. In no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Dow AgroSciences or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

Produced for
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

Label Code: D02-195-007
Replaces Label: D02-195-006
LOES Number: 010-02031

EPA accepted 02/09/11

Revisions

1. Added information for delaying development of fungicide resistance.
2. Added prohibition against applying to carrotwood.

Dow AgroSciences LLC encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name
EAGLE* 20EW Fungicide

COMPANY IDENTIFICATION
Dow AgroSciences LLC
A Subsidiary of The Dow Chemical Company
9330 Zionsville Road
Indianapolis, IN 46268-1189
United States

Customer Information Number: 800-992-5994
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-992-5994
Local Emergency Contact: 352-323-3500

2. Hazards Identification

Emergency Overview
Color: White
Physical State: Liquid.
Odor: Ester
Hazards of product:

CAUTION! May cause eye irritation. May be harmful if inhaled. May cause central nervous system effects. May cause anesthetic effects. May cause respiratory tract irritation. Isolate area. Keep upwind of spill. Toxic fumes may be released in fire situations. Suspect cancer hazard. May cause cancer.

OSHA Hazard Communication Standard
This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Health Effects

Eye Contact: May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. In humans, eye irritation resulted from brief (minutes) exposure to cyclohexanone vapor concentration of 50 ppm and above.
Skin Contact: Brief contact may cause slight skin irritation with local redness.
Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Inhalation: Prolonged excessive exposure to mist may cause adverse effects. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause central nervous system effects. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. Signs and symptoms of excessive exposure may include: Sweating. Nausea and/or vomiting.
Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Excessive exposure may cause neurologic signs and symptoms. Observations in animals include: Convulsions. Muscle spasms or twitches.
Aspiration hazard: Based on physical properties, not likely to be an aspiration hazard.
Effects of Repeated Exposure: For the active ingredient(s): In animals, effects have been reported on the following organs: Adrenal gland. Kidney. Liver. Testes. Thyroid. Based on information for component(s): In animals, effects have been reported on the following organs: Lung. Thyroid. Gastrointestinal tract. Kidney. Liver. Urinary tract. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
Cancer Information: Contains naphthalene which has caused cancer in some laboratory animals. However, the relevance of this to humans is unknown.
Birth Defects/Developmental Effects: For the active ingredient(s): Has been toxic to the fetus in lab animals at doses nontoxic to the mother. For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother.
Reproductive Effects: For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Cyclohexanone caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals.

3. Composition Information

Component	CAS #	Amount
Myclobutanil	88671-89-0	20.0 %
Cyclohexanone	108-94-1	10.0 %
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	25.0 %
Propylene glycol	57-55-6	6.0 %
1,2,4-Trimethylbenzene	95-63-6	0.4 %
Naphthalene	91-20-3	0.3 %
Balance	Not available	38.3 %

4. First-aid measures

Description of first aid measures

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Inhalation: Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.
Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Eye Contact: Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be immediately available.
Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed

Maintain adequate ventilation and oxygenation of the patient. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. Probable mucosal damage may contraindicate the use of gastric lavage. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.
Repeated excessive exposure may aggravate preexisting lung disease.

5. Fire Fighting Measures

Suitable extinguishing media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen cyanide. Hydrogen chloride. Carbon monoxide. Carbon dioxide.
Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the “Accidental Release Measures” and the “Ecological Information” sections of this (M)SDS.
Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.
Methods and materials for containment and cleaning up: Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

7. Handling and Storage

Handling
General Handling: Keep out of reach of children. Do not swallow. Avoid breathing vapor or mist. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Storage
Store in a dry place. Store in original container. Keep container tightly closed. Do not store near food, foodstuffs, drugs or potable water supplies.

To maintain product quality, recommended storage temperature is > -5 °C

8. Exposure Controls / Personal Protection

Exposure Limits

Component	List	Type	Value
Cyclohexanone	ACGIH	TWA	20 ppm SKIN
	ACGIH	STEL	50 ppm SKIN
	OSHA Table Z-1	PEL	200 mg/m3 50 ppm
	Dow IHG	TWA	7.5 ppm SKIN
Naphthalene	ACGIH	TWA	10 ppm SKIN
	ACGIH	STEL	15 ppm SKIN
	OSHA Table Z-1	PEL	50 mg/m3 10 ppm
Propylene glycol	WEEL	TWA Aerosol.	10 mg/m3
Myclobutanil	Dow IHG	TWA	0.5 mg/m3
1,2,4-Trimethylbenzene	ACGIH	TWA	25 ppm

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

A “skin” notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact.
It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

Personal Protection

Eye/Face Protection: Use chemical goggles. If exposure causes eye discomfort, use a full-face respirator.
Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Neoprene. Polyethylene. Ethyl vinyl alcohol laminate (“EVAL”). Examples of acceptable glove barrier materials include: Butyl rubber. Natural rubber (“latex”). Nitrile/butadiene rubber (“nitrile” or “NBR”). Polyvinyl chloride (“PVC” or “vinyl”). Viton. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.
Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

Engineering Controls

Ventilation: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

9. Physical and Chemical Properties

Appearance	
Physical State	Liquid.
Color	White
Odor	Ester
Odor Threshold	No test data available
pH	6.57 (@ 100 %) *CIPAC MT 75* (neat)
Melting Point	Not applicable
Freezing Point	No test data available
Boiling Point (760 mmHg)	No test data available.
Flash Point - Closed Cup	> 100 °C (> 212 °F) *CIPAC MT 12.3*
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammable Limits In Air	**Lower**: No test data available **Upper**: No test data available
Vapor Pressure	No test data available
Vapor Density (air = 1)	No test data available
Specific Gravity (H2O = 1)	1.031 20 °C/4 °C *Digital Density Meter (Oscillating Coil)*
Solubility in water (by weight)	emulsifiable
Partition coefficient, n-octanol/water (log Pow)	No data available for this product. See Section 12 for individual component data.
Autoignition Temperature	No test data available
Decomposition Temperature	No test data available
Dynamic Viscosity	2,484 cPs @ 25 °C

Kinematic Viscosity	No test data available
Explosive properties	no data available
Oxidizing properties	no data available
Liquid Density	1.03 g/cm3 @ 20 °C *Digital density meter*
Surface tension	38.2 mN/m @ 25 °C *EC Method A5*

10. Stability and Reactivity

Reactivity
No dangerous reaction known under conditions of normal use.
Chemical stability
Stable under recommended storage conditions. See Storage, Section 7.

Possibility of hazardous reactions
Polymerization will not occur.
Conditions to Avoid: Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Avoid contact with: Strong oxidizers.
Hazardous decomposition products
Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Hydrogen chloride. Hydrogen cyanide. Nitrogen oxides. Toxic gases are released during decomposition.

11. Toxicological Information

Acute Toxicity
Ingestion
As product: Single dose oral LD50 has not been determined. For similar material(s): LD50, rat, female 3,749 mg/kg
Dermal
As product: The dermal LD50 has not been determined. For similar material(s): LD50, rat, male and female > 2,000 mg/kg
No deaths occurred at this concentration.
Inhalation
As product: The LC50 has not been determined. Estimated. LC0, Aerosol, rat > 5 mg/l
Eye damage/eye irritation
May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. In humans, eye irritation resulted from brief (minutes) exposure to cyclohexanone vapor concentration of 50 ppm and above.
Skin corrosion/irritation
Brief contact may cause slight skin irritation with local redness.
Sensitization
Skin
For similar material(s): Did not cause allergic skin reactions when tested in guinea pigs.
Repeated Dose Toxicity
For the active ingredient(s): In animals, effects have been reported on the following organs: Adrenal gland. Kidney. Liver. Testes. Thyroid. Based on information for component(s): In animals, effects have been reported on the following organs: Lung. Thyroid. Gastrointestinal tract. Kidney. Liver. Urinary tract. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects. Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.
Chronic Toxicity and Carcinogenicity

Active ingredient did not cause cancer in laboratory animals. Contains naphthalene which has caused cancer in some laboratory animals. However, the relevance of this to humans is unknown.

Carcinogenicity Classifications:

Component	List	Classification
Cyclohexanone	ACGIH	Confirmed animal carcinogen with unknown relevance to humans.; Group A3
Naphthalene	IARC	Possibly carcinogenic to humans.; 2B
	NTP	Anticipated carcinogen.

Developmental Toxicity

For the active ingredient(s): Has been toxic to the fetus in lab animals at doses nontoxic to the mother. Did not cause birth defects in laboratory animals. For the minor component(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

Reproductive Toxicity

For the active ingredient(s): In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Cyclohexanone caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals.

Genetic Toxicology

For the active ingredient(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative. For the minor component(s): In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were inconclusive

12. Ecological Information

Toxicity

Based on information for a similar material: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity

For similar material(s): LC50, Oncorhynchus mykiss (rainbow trout), 96 h: 10.3 mg/l

Aquatic Plant Toxicity

For similar material(s): EC50, Pseudokirchneriella subcapitata (green algae), biomass growth inhibition: 8.6 mg/l

Toxicity to Micro-organisms

For similar material(s): EC50; activated sludge: 71 mg/l

Toxicity to Above Ground Organisms

Based on information for a similar material: contact LD50, Apis mellifera (bees): > 200 ug/bee

Based on information for a similar material: oral LD50, Apis mellifera (bees): > 171 ug/bee

Persistence and Degradability

Data for Component: **Myclobutanil**

No relevant data found.

Data for Component: **Cyclohexanone**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
87 %	14 d	OECD 301C Test	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.21E-11 cm3/s	10.6 h	Estimated.

Theoretical Oxygen Demand: 2.61 mg/g

Data for Component: **Solvent naphtha (petroleum), heavy aromatic**

Biodegradation may occur under aerobic conditions (in the presence of oxygen). Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable;

however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
30 - 41 %	28 d	OECD 301D Test	fail

Data for Component: **Propylene glycol**

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen).

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
81 %	28 d	OECD 301F Test	pass
96 %	64 d	OECD 306 Test	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.28E-11 cm3/s	10 h	Estimated.

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
69.000 %	70.000 %	86.000 %	

Chemical Oxygen Demand: 1.53 mg/mg

Theoretical Oxygen Demand: 1.68 mg/mg

Data for Component: **1,2,4-Trimethylbenzene**

Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
4 - 18 %	28 d	OECD 301C Test	Not applicable

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
1.670E-11 cm3/s	0.641 d	Estimated.

Theoretical Oxygen Demand: 3.19 mg/mg

Data for Component: **Naphthalene**

Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).

Indirect Photodegradation with OH Radicals

Rate Constant	Atmospheric Half-life	Method
2.16E-11 cm3/s	5.9 h	Estimated.

Biological oxygen demand (BOD):

BOD 5	BOD 10	BOD 20	BOD 28
57.000 %	71.000 %	71.000 %	

Theoretical Oxygen Demand: 3.00 mg/mg

Bioaccumulative potential

Data for Component: **Myclobutanil**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 2.94 Measured

Data for Component: **Cyclohexanone**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient, n-octanol/water (log Pow): 0.81 Measured

Data for Component: **Solvent naphtha (petroleum), heavy aromatic**

Bioaccumulation: Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

Partition coefficient, n-octanol/water (log Pow): 2.9 - 6.1 Measured

Bioconcentration Factor (BCF): 61 - 159; Fish

Data for Component: **Propylene glycol**

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
Partition coefficient, n-octanol/water (log Pow): -1.07 Measured
Bioconcentration Factor (BCF): 0.09; Estimated.

Data for Component: **1,2,4-Trimethylbenzene**

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient, n-octanol/water (log Pow): 3.63 Measured
Bioconcentration Factor (BCF): 33 - 275; Cyprinus carpio (Carp); Measured

Data for Component: **Naphthalene**

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).
Partition coefficient, n-octanol/water (log Pow): 3.3 Measured
Bioconcentration Factor (BCF): 40 - 300; Fish; Measured

Mobility in soil

Data for Component: **Myclobutanil**

Mobility in soil: Potential for mobility in soil is low (Koc between 500 and 2000)., Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.
Partition coefficient, soil organic carbon/water (Koc): 518**Henry's Law Constant (H):** 4.28E-09 atm*m3/mole Measured

Data for Component: **Cyclohexanone**

Mobility in soil: Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient, soil organic carbon/water (Koc): 15 Estimated.
Henry's Law Constant (H): 1.04E-05 atm*m3/mole Measured

Data for Component: **Solvent naphtha (petroleum), heavy aromatic**

Mobility in soil: No data available.

Data for Component: **Propylene glycol**

Mobility in soil: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process., Potential for mobility in soil is very high (Koc between 0 and 50).
Partition coefficient, soil organic carbon/water (Koc): < 1 Estimated.
Henry's Law Constant (H): 1.2E-08 atm*m3/mole Measured

Data for Component: **1,2,4-Trimethylbenzene**

Mobility in soil: Potential for mobility in soil is low (Koc between 500 and 2000).
Partition coefficient, soil organic carbon/water (Koc): 720 Estimated.
Henry's Law Constant (H): 6.16E-03 atm*m3/mole; 25 °C Measured

Data for Component: **Naphthalene**

Mobility in soil: Potential for mobility in soil is medium (Koc between 150 and 500).
Partition coefficient, soil organic carbon/water (Koc): 240 - 1,300 Measured
Henry's Law Constant (H): 2.92E-04 - 5.53E-04 atm*m3/mole; 25 °C Measured
Distribution in Environment: Mackay Level 1 Fugacity Model:

Air	Water.	Biota	Soil	Sediment
74 %	8.5 %	< 0.01 %	18 %	0.39 %

13. Disposal Considerations

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. Transport Information

DOT Non-Bulk
NOT REGULATED

DOT Bulk
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: Solvent naphtha (petroleum), heavy aromatic,Naphthalene,Cyclohexanone
Hazard Class: 9 **ID Number:** UN3082 **Packing Group:** PG III

IMDG
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: Solvent naphtha (petroleum), heavy aromatic,Naphthalene,Cyclohexanone
Hazard Class: 9 **ID Number:** UN3082 **Packing Group:** PG III
EMS Number: F-A,S-F
Marine pollutant.: Yes

ICAO/IATA
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S
Technical Name: Solvent naphtha (petroleum), heavy aromatic,Naphthalene,Cyclohexanone
Hazard Class: 9 **ID Number:** UN3082 **Packing Group:** PG III
Cargo Packing Instruction: 964
Passenger Packing Instruction: 964
Additional Information

Reportable quantity: 37,078 lb – NAPHTHALENE, 49,900 lb – CYCLOHEXANONE

MARINE POLLUTANT

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	No
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
This product contains the following substances which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR 372.

Component	CAS #	Amount
Myclobutanil	88671-89-0	20.0%
Naphthalene	91-20-3	0.3%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:
The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Component	CAS #	Amount
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	25.0%
Cyclohexanone	108-94-1	10.0%
Propylene glycol	57-55-6	6.0%

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List:
To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103
This product contains the following substances which are subject to CERCLA Section 103 reporting requirements and which are listed in 40 CFR 302.4.

Component	CAS #	Amount
Cyclohexanone	108-94-1	10.0%
Naphthalene	91-20-3	0.3%

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.
California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)
WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Toxic Substances Control Act (TSCA)
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

16. Other Information

Hazard Rating System

NFPA	Health	Fire	Reactivity
	1	1	0

Revision

Identification Number: 1001719 / 1016 / Issue Date 05/24/2012 / Version: 3.2
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation

Action Level	A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

Dow AgroSciences LLC urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

MATERIAL SAFETY DATA SHEET

Syngenta Crop Protection, LLC
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: **SUBDUE MAXX** Product No.: A9619C

EPA Signal Word: Caution

Active Ingredient(%): Mefenoxam (22.0%) CAS No.: 70630-17-0 & 69516-34-3

Chemical Name: (R,S)-2-[(2,6-dimethylphenyl)-methoxyacetylamino]-propionic acid methyl ester

Chemical Class: Phenylamide Fungicide

EPA Registration Number(s): 100-796 **Section(s) Revised: 9**

2. HAZARDS IDENTIFICATION

Health and Environmental

Harmful if inhaled. May be harmful if swallowed. Causes eye and skin irritation.

Hazardous Decomposition Products

None known.

Physical Properties

Appearance: Amber liquid

Odor: Sweet and waxy

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Mefenoxam (22.0%)	Not Established	Not Established	10 mg/m TWA ***	No

*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
Syngenta Hazard Category: B, S

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: 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 Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method):	> 200°F	
Flammable Limits (% in Air):	Lower: Not Applicable	Upper: Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Not Applicable	

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact:	Where eye contact is likely, use chemical splash goggles.
Skin Contact:	Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear.
Inhalation:	A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.
	In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber liquid
Odor:	Sweet and waxy
Melting Point:	Not Applicable
Boiling Point:	Not Available
Specific Gravity/Density:	1.102 g/ml ; 9.196 lb/gal @ 68°F
pH:	7 - 9 (1% solution in H2O @ 77°F (25°C))

Solubility in H2O

Mefenoxam:	26 g/l @ 77°F (25°C)

Vapor Pressure

Mefenoxam:	2.5 x 10(-5) mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	None known.
Materials to Avoid:	None known.
Hazardous Decomposition Products:	None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:		
	Oral (LD50 Female Rat) :	2965 mg/kg body weight
Dermal:		
	Dermal (LD50 Rat) :	> 5050 mg/kg body weight
Inhalation:		
	Inhalation (LC50 Rat) :	> 2.8 mg/l air - 4 hours
Eye Contact:	Moderately Irritating (Rabbit)	
Skin Contact:	Practically Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Reproductive/Developmental Effects

Mefenoxam: None observed.

Chronic/Subchronic Toxicity Studies

Mefenoxam: Liver effects at high dose animal tests.

Carcinogenicity

Mefenoxam: None observed.

Other Toxicity Information

None

Toxicity of Other Components

Not Applicable

Target Organs

Active Ingredients

Mefenoxam: Liver

Inert Ingredients

Not Applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects

Mefenoxam:

Fish (Rainbow Trout) 96-hour LC50 > 121 ppm

Invertebrate (Water Flea) Daphnia Magna 48-hour EC50 > 113 ppm

Bird (Bobwhite Quail) 14-day LD50 981 mg/kg

Environmental Fate

Mefenoxam:

The information presented here is for the active ingredient, mefenoxam.
Does not bioaccumulate. Not persistent in soil or water. Moderate mobility in soil. Mixes/sinks (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA
Not regulated.

Comments

Water Transport - International
Not regulated.

Air Transport
Not regulated.

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Not Applicable

California Proposition 65

This product does not contain chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

CERCLA/SARA 304 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	2	Health:	1
Flammability:	1	Flammability:	1
Instability:	0	Reactivity:	0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 4/9/1996

Revision Date: 3/6/2012 Replaces: 5/5/2011

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

End of MSDS

PULL HERE TO OPEN

GROUP 4 FUNGICIDE

Subdue MAXX®

Fungicide

For the control of certain diseases in conifers, nonbearing citrus, nonbearing deciduous fruits and nuts, ornamentals, and turf

Active Ingredient:	
Mefenoxam*	22.0%
Other Ingredients:	78.0%
Total:	100.0%

**CAS No. 70630-17-0 and 69516-34-3*

EPA Reg. No. 100-796 *EPA Est. 39578-TX-1*

Product of Switzerland
Formulated in the USA

1 gallon
Net Contents

syngenta®

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

SCP 796B-L2G 0909
297295

FIRST AID	
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 or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

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

continued...

PRECAUTIONARY STATEMENTS *(continued)*

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

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

Engineering Control Statements

When handlers use closed systems or enclosed cabs 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 immediately if pesticide gets inside. Then wash thoroughly and put on 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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

Groundwater Advisory Statement

This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

Physical or Chemical Hazards

Do not use, pour, spill, or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

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

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, INC. or Seller. To the extent permitted by applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. To the extent permitted by applicable law, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

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.

Maximum usage when applying both metalaxyl and mefenoxam containing products to the same crop within the same season: Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

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, 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 48 hours.

Exception: If the product is soil injected, soil-incorporated, or applied by soil drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated:

- There is no restricted-entry interval (REI) requirement following soil injection, soil incorporated, or a soil drench application to ornamentals.

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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

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 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 greenhouses.

Do not enter or allow others to enter until sprays have dried.

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN POOR DISEASE CONTROL OR CROP INJURY.

USE INFORMATION

Subdue MAXX is a systemic fungicide for use on ornamentals; turf; nonbearing citrus grown in nurseries and as landscape plantings; conifers grown in nurseries and plantations, including Christmas trees; and nonbearing deciduous fruit and nut trees grown in nurseries.

Restriction: Maximum usage when applying both metalaxyl and mefenoxam containing products to the same crop within the same season: Do not apply more than the maximum seasonal total for the active ingredient as stated on the label of the product containing the lowest seasonal total on that crop.

GROUP **4** FUNGICIDE

Resistance Management Recommendations: Subdue MAXX is a systemic fungicide having a specific mode of action. Use of Subdue MAXX could result in development of insensitive strains of fungi. Development of insensitivity cannot be predicted. Consult with your State Agricultural Experiment Station or Extension Service Specialist for guidance and ways to control any possible Subdue MAXX insensitive strains of fungi which may occur.

The active ingredient in Subdue MAXX is mefenoxam, a Group 4 fungicide (phenylamide). Some disease pathogens are known to have developed resistance to fungicides used repeatedly for their control. To prevent the development of insensitive strains of fungi to mefenoxam, apply Subdue MAXX in an alternation or tank–mix program with fungicides that are not in Group 4 and to which pathogen resistance has not developed. Applications targeted for downy mildew diseases should always be in a tank mixture with a non-Group 4 fungicide.

For foliar applications to ornamentals and conifers, do not make more than one (1) application before alternating with a non-Group 4 fungicide for sequential foliar applications. For all other applications, do not make more than two (2) sequential applications of Subdue MAXX before alternating with a non-Group 4 fungicide. An example of a sound resistance management program would include two (2) Subdue MAXX applications (one could be a foliar application) followed by two (2) non-Group 4 fungicide applications.

Spray Drift Precaution: To avoid spray drift, do not apply under windy conditions. Avoid spray overlap, or crop injury may result.

Rotational Crops: Crops listed in this label may be replanted immediately in soil treated with mefenoxam. All other crops may not be planted in mefenoxam treated soil for a period of 12 months.

APPLICATION PROCEDURES

Subdue MAXX may be applied through traditional spray equipment or through irrigation systems as a soil drench, soil surface (broadcast or banded), or as a stem and foliar spray. Subdue MAXX may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

Banded Applications:

Calculate the amount of Subdue MAXX needed as follows:

$$\frac{\text{band width in inches}}{\text{row width in inches}} \times \text{broadcast rate per acre} = \text{amount needed per acre}$$

Application Through Irrigation Systems

Subdue MAXX alone or in tank mixture with other pesticides registered for application through irrigation systems may be applied in irrigation water at rates recommended on this label. This product may be applied through micro sprinkler or drip irrigation systems. Do not apply this product through any other type of irrigation system.

Uniform Water Distribution and System Calibration: Plant injury or lack of effectiveness may 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 label-prescribed safety devices for public water supplies are in place. A person knowledgeable of the chemigation system and responsible for its operation shall shut the system down and make necessary adjustments should the need arise.

Safety Devices for Irrigation Systems Connected to Public Water Supplies

If the source of water for your irrigation system is a public water supply, follow the instructions below.

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to public water systems must 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, water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
5. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Safety Devices for Irrigation Systems *Not* Connected to a Public Water Supply

1. The system must contain a functional check-valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check-valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where the 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.

Chemigation Application Instructions

Subdue MAXX must be applied on the schedule specified in the use recommendations, not according to the irrigation schedule.

Only pressure injection or venturi equipment is recommended.

The following calibration and application techniques are provided for user reference, but do not constitute a warranty of fitness for application through sprinkler irrigation equipment. Users should check with state and local regulatory agencies for potential use restrictions before applying any agricultural chemical through sprinkler irrigation equipment.

General Calibration Instructions

1. Each run of the irrigation system must be calibrated separately to determine the time it takes water to move through the system and to make sure all emitters in the system are putting out the same amount of water.
2. Only pressure injection or venturi equipment is recommended.
3. Determine the area to be treated in each irrigation run.
4. Measure the output of each of the emitters or drip tubes closest to and farthest from the injector site.
5. For calibration, substitute a concentrated detergent (such as Wisk) for the Subdue MAXX in the injector tank. It is important to use the same volume of soap solution as the planned volume of Subdue MAXX solution when calibrating the system. The detergent will bubble as it leaves the emitters. The time period over which bubbles occur should be checked for both the closest and farthest emitters. If these times are not within 2 minutes of each other, adjust the dilution ratio and/or the injection rate.

Step-by-Step Calibration and Application Instructions

1. Before starting to calibrate, operate the system until all the emitters are putting out at equal flow rates or until the system is operating at full pressure.
2. Make up an indicator solution of detergent or fertilizer, using the same ratio to be used with mixing Subdue MAXX.
3. Set the injector to apply the indicator solution at the injection rate to be used in the actual Subdue MAXX application.
4. Attach a 5-inch length of flexible tubing over the emitter closest to the injection point, another length over the emitter farthest away. Both emitters should be monitored to determine the time intervals that the indicator solutions are observed.
5. Begin injecting the indicator solution. Direct the flow from the tubes at the emitters into a small container. Begin timing when the indicator solution is first detected, stop timing when the indicator solutions are no longer detected.

6. If the period of detection of the indicator solution between the 2 emitters are within 2 minutes of each other, comparable coverage will be obtained. If they are not, make adjustments by increasing the dilution ratio, using more water per part of Subdue MAXX, or adjust the injector to a slower flow rate.
7. Once the system is calibrated, dilute the needed amount of Subdue MAXX with water and any other tank mix partners in the injection tank using a minimum of 15 parts water to 1 part of Subdue MAXX in the solution tank. Liquid fertilizer may replace all or part of the water. If diluted in liquid fertilizer, the pH level must be less than 7.5. Follow the directions for mixing and equipment setup in the **Mixing Instructions** section of this label.
8. Do not begin to inject Subdue MAXX into the system until all emitters are producing equal flow rates, or until the system is at full pressure. Inject the Subdue MAXX solution at a ratio of 50:1 or greater. Injecting a larger volume of a more dilute mixture will usually allow a more accurate calibration of the metering equipment.
9. Inject the Subdue MAXX into the system at the beginning of the irrigation set in ½ to 1 inch of irrigation water.

MIXING INSTRUCTIONS

Prepare no more spray mixture than is required for the immediate operation. Agitate the spray solution continuously during mixing and during application. Rinse the spray tank thoroughly with clean water after each day's use and dispose of pesticide rinsate by application to an already treated area.

Compatability: Subdue MAXX is usually compatible with Banner MAXX®, Daconil®, Fore®, Heritage®, and Medallion®.

To determine the compatibility of Subdue MAXX with these and other products, pour the products into a small container of water in the correct proportions. After thorough mixing, let stand for 5 minutes. If the combination remains mixed, or can be remixed readily, the mixture should be considered compatible.

Subdue MAXX Alone: Add 1/4 to 1/2 of the required amount of water to the spray tank. With the agitator running, add the Subdue MAXX to the tank. Continue agitation while adding the remainder of the water. Begin application of the spray solution after the Subdue MAXX has completely dispersed into the mix water. Maintain agitation until all of the mixture has been sprayed.

Subdue MAXX + Tank Mixtures: Add 1/4 to 1/2 of the required amount of water to the spray tank. Start the agitator before adding any tank-mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, microencapsulated formulations, such as Subdue MAXX, and emulsifiable concentrates. Always allow each tank-mix partner to become fully dispersed before adding the next product. Provide sufficient agitation while adding the remainder of the water and the Subdue MAXX to the spray tank. Allow the Subdue MAXX to completely disperse into the mix water. Maintain agitation until all of the mixture has been sprayed.

Note: When using Subdue MAXX in tank mixtures, all products in water-soluble packaging should be added to the tank before any other tank-mix partner, including Subdue MAXX. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank.

If using Subdue MAXX in a tank mixture, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix partner label. Label dosage must not be exceeded and the most restrictive label precautions and limitations must be followed. This product must not be mixed with any product which prohibits such mixing. Tank mixtures or other applications of products referenced on this label are permitted only in those states in which the products are registered. Test plant safety of tank mixtures on a small number of plants for safety before treating entire crop.

ORNAMENTALS

Subdue MAXX is a systemic fungicide that provides control of damping off, root and stem diseases caused by *Pythium* and *Phytophthora* spp., and foliar diseases such as downy mildew and foliar diseases caused by *Phytophthora* spp. including *Phytophthora ramorum*.

Use Subdue MAXX on ornamentals grown in greenhouse, lath and shade-houses, outdoor field and container nurseries (including non-bearing fruit and nut trees), conifer plantations, and in commercial and residential landscapes.

Subdue MAXX may be applied through traditional spray equipment or through irrigation systems, as a soil drench or as a soil surface spray (broadcast or banded), or as a stem and foliar spray. Subdue MAXX may also be incorporated into a pre-potting growing media for subsequent seeding or transplanting of ornamentals.

Rate Selection: Within a rate range given for a specific group of ornamentals, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and the shortest interval.

Soil Surface Sprays: For best efficacy with soil surface applications, irrigate in with at least 1/2 inch of water within 24 hours. If applications are banded, calculate the amount of Subdue MAXX needed by using the formula for banded application under **Application Procedures** in the **Use Information** section of this label.

Growing Medium Drench: Use enough of the specified Subdue MAXX water solution to wet the root zone of plants. In general, 1.0 pt./sq. ft. of this solution is sufficient for ornamentals growing in containers with 4 inches of growth media. Containers with growth media depth greater than 4 inches generally require 1 1/2 to 2.0 pts./sq. ft. of the solution. As part of a sound resistance management program, do not make more than two (2) sequential applications of Subdue MAXX before alternating with a fungicide of a different mode of action.

Foliar and Stem Sprays: Apply thoroughly to all parts of the foliage and stems. For *Phytophthora* spp. and *Pythium* spp., you may apply Subdue MAXX alone. For downy mildew control (and following resistance management practices), you must apply in a tank mixture with a non-Group 4 fungicide. As part of a sound resistance management program, apply only one (1) foliar application of Subdue MAXX before alternating with a non-Group 4 fungicide for sequential foliar applications.

Pre-Potting Growing Media Mix: Combine 0.125 to 0.25 fl. ozs. Subdue MAXX into 1.0 gallon of water. Uniformly mix this solution onto one (1) cubic yard of potting media. Uniform mixing can be accomplished by placing the potting mix in a rotating drum and spraying the Subdue MAXX solution onto the mix while the drum is rotating. It is recommended that this media treatment be prepared just prior to use.

NOTICE TO USER: Due to the large number of species and varieties of ornamentals and nursery plants, it is impossible to test every one for tolerance to Subdue MAXX and tank mixtures with Subdue MAXX. Neither the manufacturer nor the seller has determined whether or not Subdue MAXX can be used safely on ornamental and nursery plants not specified on this label. The applicator must determine if Subdue MAXX and tank mixtures with other fungicides can be used safely prior to commercial use. In a small area, test the labeled rates for a particular group of unlabeled plants, i.e., bedding plants, foliage, etc., for phytotoxicity prior to widespread use.

Foliage Plants Aglaonema Aphelandra Dieffenbachia Peperomia Philodendron***** Pothos Schefflera Sedum Sempervivum Zygocactus	**Drench:** Mix 0.3 to 0.6 fl. oz. Subdue MAXX with 100 gals. of water. Apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 3-month intervals, if necessary. *****On Philodendron, use 0.50 to 1.0 fl. oz. Subdue MAXX per 100 gals. *Precaution: To minimize the potential for injury to Pothos, do not use more than 0.38 fl. oz. Subdue MAXX per 100 gals. and do not apply more frequently than once every 3 months.* **Pre-Potting Growing Media Mix:** Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 to 0.25 fl. oz. Subdue MAXX with each cu. yd. of pre-potting growing media. **Soil Surface Spray:** Apply 1.0 fl. oz. Subdue MAXX per 1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 1/2 inch of water within 24 hours. **Foliar Application:** Spray foliage thoroughly. For downy mildew, apply Subdue MAXX at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For *Phytophthora* spp. and *Pythium* spp., apply Subdue MAXX at 0.5 to 1.0 fl. oz. per 100 gals. of water. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.

Bedding Plants Ageratum Algerian ivy Artemisia Aster Begonia Caladium Carnation Chrysanthemum Coleus Daisy English ivy Foxglove Gaillardia Geranium Impatiens Marigold Pansy Petunia Phlox Pinks Primrose Prostrate Rosemary Salvia Snapdragon Verbena Vinca Zinnia	**Drench at Seeding** (Soil 2-3 inches deep): Mix 0.125 to 0.25 fl. oz. Subdue MAXX with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. **Drench at Transplanting** (Soil 2-3 inches deep): Mix 0.50 to 1.0 fl. oz. Subdue MAXX with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75 to 1.0 fl. oz. Subdue MAXX per 100 gals. more often than once every 6 weeks. **Pre-Potting Growing Media Mix At Seeding and At Transplanting:** Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 fl. oz. Subdue MAXX with each cu. yd. of pre-potting growing media. **Soil Surface Spray:** Apply 1.0 fl. oz. Subdue MAXX per 1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 1/2 inch of water within 24 hours. **Foliar Application:** Spray foliage thoroughly. For downy mildew, apply Subdue MAXX at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For *Phytophthora* spp. and *Pythium* spp., apply Subdue MAXX at 0.5 to 1.0 fl. oz. per 100 gals. of water. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.

Flowers African violet Anthurium Baby's breath Carnation Chrysanthemum Columbine Delphinium Easter lily Geranium Gloxinia Poinsettia Rose	**Drench:** Mix 0.50 to 1.0 fl. oz. Subdue MAXX with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 1 to 2-month intervals, if necessary. Do not apply rates of 0.75 to 1.0 fl. oz. Subdue MAXX per 100 gals. more often than every 6 weeks. *Precaution: Do not apply more than 0.50 fl. oz. Subdue MAXX per 100 gals. of water to Easter lily and only make one at-planting application.* **Pre-Potting Growing Media Mix at Seeding and at Transplanting:** Apply to growing media mix just before planting. Mix only enough for current use. Do not store. Thoroughly mix 0.125 fl. oz. Subdue MAXX with each cubic yard of pre-potting media. **Soil Surface Spray:** Apply 1.0 fl. oz. Subdue MAXX per 1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 1/2 inch of water within 24 hours. **Foliar Application:** Spray foliage thoroughly. For downy mildew, apply Subdue MAXX at 0.50 to 1.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For *Phytophthora* spp. and *Pythium* spp., apply Subdue MAXX at 0.5 to 1.0 fl. oz. per 100 gals. of water. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.

Azaleas	**Drench:** Pythium, Phytophthora root and crown rot - Mix 0.63 to 1.25 fl. oz. Subdue MAXX with 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 4-month intervals, if necessary. **Soil Surface Spray:** Apply 1.25 to 2.50 fl. oz. Subdue MAXX per 1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 1/2 inch of water within 24 hours. **Foliar Application:** Spray foliage thoroughly. For *Phytophthora* spp. and *Pythium* spp., apply Subdue MAXX at 0.50 to 1.0 fl. oz. per 100 gals. of water. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications. *Precautions: (1) To minimize the potential for injury to azaleas, do not apply repeat soil applications of 1.25 fl. oz. Subdue MAXX per 100 gals. closer than every 3 months, and do not exceed a total of 2.5 fl. oz. Subdue MAXX in 6 months. (2) Use the lower rate for "Coral Bell" variety.*

Woody Ornamentals Other Than Azaleas Aucuba japonica Arborvitae Boxwood Ceanothus Cotoneaster Dogwood Ficus "Halls" Honeysuckle Ilex *Juniperus* spp. Photinia *Pieris japonica* *Pinus* spp. Pittosporum Rhododendron White cedar White pine Yew	**Drench:** Mix 1.0 to 2.0 fl. oz. Subdue MAXX per 100 gals. of water and apply 1.0 pt. of solution per sq. ft. to the soil surface. For growth media depth greater than 4 inches, apply 1.5 to 2.0 pts. of solution per sq. ft. to the soil surface. Repeat applications at 2 to 3-month intervals, if necessary. Do not apply rates of 2.0 fl. oz. Subdue MAXX per 100 gals. more often than every 10 weeks. **Soil Surface Spray:** Apply 1.25 to 2.50 fl. oz. Subdue MAXX per 1,000 sq. ft. to the soil surface in a broadcast or banded spray in sufficient water to obtain thorough coverage of the plant root zone. Avoid application to the foliage. For best efficacy, irrigate in with at least 1/2 inch of water within 24 hours. **Foliar Application:** Spray foliage thoroughly. For downy mildew, apply Subdue MAXX at 0.50 to 2.0 fl. oz. per 100 gals. of water in a tank mix (for resistance management) with a non-Group 4 fungicide labeled for downy mildew. For *Phytophthora* spp. and *Pythium* spp., apply Subdue MAXX at 0.5 to 1.0 fl. oz. per 100 gals. of water. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX (alone or in a tank mix) before alternating with a non-Group 4 fungicide for sequential foliar applications.

INTERIORSCAPE SOIL DRENCH APPLICATIONS AND INDIVIDUAL PLANT USE

In situations where water volumes used are much less than 100 gals. and the area treated is small, the following table provides the Subdue MAXX rates to make small quantities of solution. Refer to the plant type for the correct fl. oz. of product to use when utilizing this table.

	Amount of Subdue MAXX to add to water to make the following quantities			
Rate of Subdue MAXX (fl. oz.)	**1 gal.**	**5 gals.**	**10 gals.**	**25 gals.**
0.25	4 drops	18 drops	37 drops/ 0.75 ml	1.9 ml/ 3/8 tsp.
0.5	7 drops	37 drops/ 0.75 ml	75 drops/ 1.5 ml	3.8 ml/ 3/4 tsp.
1.0	15 drops	75 drops/ 1.5 ml	3.0 ml/ 1/2 tsp.	7.5 ml/ 1.5 tsp./ 1/2 Tbsp.
1.5	22 drops	3.0 ml/ 1/2 tsp.	4.5 ml/ 1 tsp.	11.3 ml/ 2.25 tsp./ 3/4 Tbsp.
2.0	30 drops	4.5 ml/ 1 tsp.	6.0 ml/ 1.5 tsp.	15.0 ml/ 3 tsp./ 1 Tbsp.

Soil Drench: Apply enough solution to the soil surface to wet the root area of the plants.

CITRUS IN NURSERIES AND LANDSCAPE PLANTINGS (NONBEARING)

Use Subdue MAXX on nonbearing citrus for control of citrus foot rot, root rot, and trunk canker caused by *Phytophthora* spp. Apply to the soil as a drench or as a spray in a banded application, or as a directed spray.

Make the first application of Subdue MAXX at the time of planting. Make repeat applications at 3-month intervals during the period when trees are actively growing.

Soil Drench: Mix 2.0 to 3.0 fl. oz. Subdue MAXX per 100 gals. of water and apply as a drench to the soil at the rate of 100 to 250 gals./1,000 ft. of row. The width of the drench treatment should be wide enough to cover the root systems of the plants. Avoid application to the foliage.

Soil Surface Spray: Apply 1.25 to 2.5 fl. oz. Subdue MAXX per 1,000 sq. ft. as a broadcast or banded surface spray to seedbeds, liners, or bedded stock in sufficient water to obtain uniform coverage. If applications are banded, the treated area should be wide enough to cover the root systems of the plants. Avoid application to the foliage. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

If applications are banded, calculate the amount of Subdue MAXX needed by using the formula for banded application under **Application Procedures** in the **Use Information** section of this label.

Directed Spray: Use 2.0 fl. oz. Subdue MAXX per 100 gals. and apply directly to the base of the plant.

Restriction: Do not use in greenhouse citrus nursery stock intended for commercial fruit production.

CONIFERS IN NURSERIES AND PLANTATIONS (INCLUDING CHRISTMAS TREES)

Subdue MAXX provides control of Phytophthora root, stem and foliar disease of conifers. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

Conifers in Nurseries

Seedbeds and Plug-Plantings	**Soil Surface Spray:** Apply 1.25 pts. of Subdue MAXX in at least 50 gals. of water per acre in the spring and again in the fall. **Foliar Application:** Use 1.0 fl. oz. Subdue MAXX per 100 gals. of water and apply to runoff. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX before alternating with a non-Group 4 fungicide for sequential foliar applications.
2-0 Transplants	**Soil Surface Spray:** Apply 2.5 pts. of Subdue MAXX in at least 50 gals. of water per acre in the spring and again in the fall. **Foliar Application:** Use 1.0 to 2.0 fl. oz. Subdue MAXX per 100 gals. of water and apply to runoff. **Resistance Management:** Apply only one (1) foliar application of Subdue MAXX before alternating with a non-Group 4 fungicide for sequential foliar applications.

Conifers in Plantations

Use of Subdue MAXX will aid in the control of Phytophthora root, stem and foliar disease, when used in conjunction with good cultural practices. The use of Subdue MAXX will not overcome poor management practices, such as planting on sites that are prone to flooding or are poorly drained. Subdue MAXX fungicide will not revitalize trees showing moderate to severe disease symptoms.

Soil Surface Applications: Apply 0.625 to 1.25 gals. of Subdue MAXX per acre in a minimum of 50 gals. of water as a directed soil spray. Avoid application to the foliage. Applications should be made in early spring before growth starts and in the fall before the ground freezes. If applications are banded, calculate the amount of Subdue MAXX needed for a banded treatment by using the formula in the **Application Procedures** section of the label.

Foliar Applications: For foliar Phytophthora (including *Phytophthora ramorum*), apply 1.0 to 2.0 fl. oz. Subdue MAXX per 100 gals. of water and apply to runoff.

Resistance Management: Apply only one (1) foliar application of Subdue MAXX before alternating with a non-Group 4 fungicide for sequential foliar applications.

DECIDUOUS FRUITS AND NUTS IN NURSERIES (NONBEARING)

Subdue MAXX provides control of Pythium root rot and Phytophthora root, crown, and collar rot of nonbearing deciduous fruits and nuts.

Soil Surface Application: Apply 3.0 fl. oz. per 1,000 sq. ft. in sufficient water to obtain thorough coverage of the soil under the canopy of the trees. Avoid application to the foliage. Treat sufficient surface area in nurseries to cover the root zone of the plants. Additional applications may be made as necessary at 3-month intervals during the growing season. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application.

Notes: (1) Do not apply to trees that will bear harvestable fruit within 12 months of the last application, or possible illegal residues may result. (2) Do not apply more than 9.0 fl. oz. per 1,000 sq. ft. (3.0 gals./A) of Subdue MAXX per year.

TURF (GOLF COURSES, LAWNS, LANDSCAPE AREAS AROUND RESIDENTIAL, INSTITUTIONAL, PUBLIC, COMMERCIAL AND INDUSTRIAL BUILDINGS, PARKS, RECREATIONAL AREAS, AND ATHLETIC FIELDS, SOD FARMS)

Subdue MAXX controls Pythium blight and Pythium damping-off in turf, yellow tuft (downy mildew) in bluegrass, and downy mildew in St. Augustinegrass. **Within the rate range given for turf, use the lower rate for the shortest interval listed and the higher rate for the longest interval. Under severe disease conditions, use the highest rate and shortest interval.**

Established Turf Pythium Blight Yellow Tuft Downy Mildew	**Foliar Application:** Apply as a preventative treatment at 0.50 to 1.0 fl. oz. in 1 to 5 gals. of water per 1,000 sq. ft. Re-treat at 10 to 21-day intervals. During periods of prolonged conditions favorable for disease development, use 0.50 to 1.0 fl. oz. on a 14-day schedule.
Newly Seeded Areas Pythium Damping-off Pythium Blight Yellow Tuft Downy Mildew	**Soil Surface Spray:** Apply 0.50 to 1.0 fl. oz. in 1 to 5 gals. of water per 1,000 sq. ft. immediately after seeding. Re-treat at 7 to 14-day intervals if conditions remain favorable for disease. For best efficacy, 1/2 inch irrigation or rainfall is required within 24 hours after application. **Note:** For long-term control of Pythium in areas when using seed treated with the active ingredient contained in Subdue MAXX, make an application of Subdue MAXX 7-10 days after seeding.

Note: For control of other diseases of turf, use Banner alone or in a tank-mix combination with Subdue MAXX. Refer to the Banner label for rates, precautions, restrictions, etc.

Resistance Management Precautions: To minimize the potential for insensitivity, (1) Make no more than 2 applications per season of any product in which the Subdue MAXX active ingredient is applied alone, and (2) Apply an alternate EPA-registered fungicide for Pythium control at least once during the season.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling (< 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

Container Handling (> 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least once complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 796B-L2G 0909
297295

BAR CODE # IS
(01) 0 07 02941 53195
LAST DIGIT IS CHECK DIGIT
UCC/EAN 128

GROUP 4 FUNGICIDE

Subdue MAXX®

Fungicide

For the control of certain diseases in conifers, nonbearing citrus, nonbearing deciduous fruits and nuts, ornamentals, and turf

Active Ingredient:	
Mefenoxam*	22.0%
Other Ingredients:	78.0%
Total:	100.0%

*CAS No. 70630-17-0 and 69516-34-3

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-796
EPA Est. 39578-TX-1

Product of Switzerland
Formulated in the USA

Manufactured for:
Syngenta Crop Protection, Inc.
P.O. Box 18300
Greensboro, North Carolina 27419-8300

SCP 796B-L2G 0909 **297295**

1 gallon

Net Contents

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional storage, disposal, precautionary statements, and directions for use inside booklet.

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

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

FIRST AID

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 or clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. **If swallowed:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

HOT LINE NUMBER: For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**.

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 apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

Physical or Chemical Hazards: Do not use, pour, spill, or store near heat or open flame.

STORAGE AND DISPOSAL

Pesticide Storage: Store in original containers only. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, mop and remove to chemical waste storage area until proper disposal can be made if product cannot be used according to label.

Pesticide Disposal: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

CONTAINER IS NOT SAFE FOR FOOD, FEED OR DRINKING WATER.

syngenta®