



# LeafGuard MC3

Anti-Transpirant

Protects evergreens, plants, flowers, trees and grass from moisture loss due to cold temperatures, windburn or drought.

Dries to a colorless, protective film.

Can be used year-round.

## STOP! READ ENTIRE LABEL BEFORE USE

### GENERAL INFORMATION

LeafGuard MC3 is an improved anti-transpirant that effectively reduces the water loss of plants. Coating the leaves with a thin film of LeafGuard MC3 can provide a water impermeable barrier that reduces the water loss from transpiration. LeafGuard MC3 will coat the leaf surface with a clear, glossy film that remains durable and stable.

LeafGuard MC3 is a mixture of polyethylenes and polyterpenes and forms an emulsion with water. LeafGuard MC3 combines the features of a uniform film coverage on the leaves with the ease of use. Applications of LeafGuard MC3 can complement sound water management practices and can improve the establishment and survival of plants exposed to extreme or adverse conditions.

Landscape contractors, retail garden centers, wholesalers, and municipalities have applied LeafGuard MC3 to deciduous trees, conifers, container stock, and bedding plants. Anti-transpirants such as LeafGuard MC3 are applied to leaf surfaces to relieve the plant from water stress during storage, shipping, and establishment. For example, bare-root and burlap transplants may suffer transplant shock because the water absorption rate of the roots cannot match the transpiration rate. Foliar applications of LeafGuard MC3 before transplanting help the transplant when the root system cannot compensate for the amount of water loss by transpiration. So, the benefits of LeafGuard MC3 are that transplant shock can be decreased, plant losses can be minimized, and the transplant season can be extended.

### MIXING INSTRUCTIONS AND CLEAN-UP

**SPRAY PREPARATION:** Check the spray tank and the equipment for cleanness before preparing the spray solution. LeafGuard MC3 should be mixed with water. Do not combine pesticides with LeafGuard MC3 except when the labeling of the pesticide permits a tank mixture.

Fill the spray tank with 1/2-3/4 of the required amount of water and begin agitation. Add the required amount of LeafGuard MC3, and add the balance of water. Maintain agitation during mixing and spraying to ensure a uniform emulsion. Refer to Table 1 for quick-mix instructions.

**Cleaning the spray equipment:** Immediately clean the spray equipment with a soap solution according to the following instructions. Prepare a soap solution by mixing one (1) cup of detergent with two (2) gallons of water.

### MIXING CHART

Table 1. Quick mix instructions for preparing 1 to 100 gallons of spray solution at 2.5 10% concentrations (v/v) with water for foliar applications.			
Spray Solutions, Gallons	Amount of LeafGuard MC3 required for:		
	2.5%	5.0%	10.0%
1	3 fl. oz.	6 fl. oz.	12 fl. oz.
2.5	8 fl. oz.	16 fl. oz.	32 fl. oz.
5	1 pint	2 pints	4 pints
10	1 quart	2 quarts	4 quarts
15	0.38 gallon	0.75 gallon	1.5 gallons
20	0.50 gallon	1.0 gallon	2.0 gallons
50	1.25 gallons	2.5 gallons	5.0 gallons
100	2.5 gallons	5.0 gallons	10.0 gallons

Equal Measures: 1.0 gallon = 4 quarts = 8 pints = 128 fl. oz.

Equal Concentrations (v/v):  
 2.5% = one (1) gallon of LeafGuard MC3 mixed with 40 gallons of water  
 5.0% = one (1) gallon of LeafGuard MC3 mixed with 20 gallons of water  
 10.0% = one (1) gallon of LeafGuard MC3 mixed with 10 gallons of water

**For hand operated sprayers (backpack, knapsack, compression, or plunger sprayers):** Rinse spray tank with water. Then, add soap solution and flush hoses, spray gun, nozzles, and strainers. Do not allow the spray solution of LeafGuard MC3 to dry in the sprayer.

**For engine driven pumps (piston, diaphragm, centrifugal, roller, and gear pumps):** Rinse with water. Then add soap solution and flush the tank, hoses, lines, nozzles, strainers, and pumps. Do not allow the spray solution of LeafGuard MC3 to dry in the sprayer.

**To clean surfaces that were sprayed accidentally:** Mix one (1) cup of detergent with two (2) gallons of water. Scrub the surface until clean and rinse with water.

### USE INSTRUCTIONS

#### WINTER DESICCATION

**TO REDUCE WINTER DESICCATION ON CONIFERS AND BROADLEAF EVERGREENS:** Mix one (1) gallon of LeafGuard MC3 with 10-20 gallons of water (Table 2). Or prepare a 5.0-10.0% (v/v) spray concentration according to the instructions in Table 1. Apply as a thorough cover spray in the late fall or early winter. Spray volumes will vary according to the plant size. Use adequate spray volumes to provide uniform coverage of all needles.

LeafGuard MC3 will maintain the plant vigor throughout the winter.

#### CHRISTMAS TREES AND GREENERY

**TO REDUCE THE DRYING OF CHRISTMAS TREES AND HOLIDAY GREENERY:** LeafGuard MC3 can reduce the drying of Christmas trees and holiday greenery and preserve the plant quality. Mix one (1) gallon of LeafGuard MC3 with 40 gallons of water. Or, prepare a 2.5% (v/v) spray concentration according to the instructions in Table 1.

Apply as a thorough cover spray before shipping or during storage at the retailers. Spray volumes will vary according to the plant size. Use adequate spray volumes to provide uniform coverage of all needles and leaves.

#### TURFGRASS

**SPRAY ADDITIVES FOR TURFGRASS FUNGICIDES:** Fall applications of LeafGuard MC3 can be a preventive measure for limiting the development of gray snow mold (Typhula blight) of fine turfgrass established on greens, aprons, approaches, and fairways. LeafGuard MC3 is not a fungicide, but combinations of LeafGuard MC3 and fungicides applied in the late fall will provide preventive and curative protection. Observe all Directions for Use and Precautionary Statements as specified on the container labels of each product.

**TO REDUCE THE WINTER AND SUMMER DESICCATION OF FINE TURFGRASS (INCLUDING GOLF GREENS):** Apply as a broadcast treatment to the dormant turfgrass (inactive growth) in the late fall or early winter when the air temperatures are above 32° F. Apply 2.5 gallons of LeafGuard MC3 per acre with spray volumes of 20-80 gallons per acre. Or, apply 8 fl. oz. of LeafGuard MC3 per 1,000 sq. ft. of turfgrass with spray volumes of 0.5-2.0 gallons per 1,000 sq. ft.

**TO REDUCE THE DESICCATION OF CUT AND ROLLED SOD:** LeafGuard MC3 can reduce the water loss of rolled sod during transit and can improve the establishment during adverse conditions. Apply as a broadcast treatment to the sod at least one (1) hour before cutting and rolling sod. Apply 2.5 gallons of LeafGuard MC3 per acre. Spray volumes of 50 gallons per acre are recommended to ensure uniform coverage.

#### TRANSPLANT SHOCK

**TO REDUCE TRANSPLANT SHOCK TO CONIFERS, BROADLEAF EVERGREENS, DECIDUOUS TREES AND SHRUBS:** Mix one (1) gallon of LeafGuard MC3 with 20-40 gallons of water (Table 2). Or, prepare a 2.5-5.0% (v/v) spray concentration according to the instructions in Table 1. Choose the spray concentration for the length of protections required.

Apply as a thorough cover spray before shipping and transplanting. Use an adequate spray volume to wet the leaves and stems. Spray the undersides of the leaves and apply to the drip point.

Do not spray or dip the roots of rooted cuttings, balled transplants, or bare-rooted transplants.

Table 2. Recommendations for conifers, broadleaf evergreens, deciduous trees and shrubs, Christmas trees, and holiday greenery.		
	Spray Concentration of LeafGuard MC3 for:	
	Survival against transplant shock. Reduction of water loss during transit.	Conservation of water. Reductions of desiccation during winter and storage.
<b>Conifers:</b> (Arborvitae, Cedars, Cypressess, Fir, Hemlock, Juniper, Pines, Spruce, and Yew)	2.5-5%	5-10%
<b>Broadleaf Evergreens:</b> (Abelia, Anise, Azalea, Barberry, Boxwood, Camellia, Cotoneaster, Euonymus, Gardenia, Heather, Holly, Jasmine, Leucothoe, Magnolia, Oleander, Photinia, Pittosporum, Privet, Rhododendron)	2.5-5%	5-10%
<b>Deciduous Trees &amp; Shrubs:</b> Ash, Basswood, Birch, Bottlebrush, Nonbearing Cherry, Chestnut, Cottonwood, Crabapple, Dogwood, Eleagnus, Elm, Forsythia, Hawthorn, Hibiscus, Hydrangea, Lilac, Linden, Maple, Myrtle, Oak, Russian Olive, Bradford Pear, Rudbud, Rose, Spirea, Sycamore, Viburnum, Weigelas)	2.5-5%	-
<b>Christmas Trees &amp; Greenery</b>	-	2.5%

**TO REDUCE THE TRANSPLANT SHOCK TO GROUNDCOVERS, VINES, BEDDING PLANTS, FLOWERS, AND VEGETABLES:** Mix one (1) gallon of LeafGuard MC3 with 20-40 gallons of water (Table 3). Or, prepare a 2.5-5.0% (v/v) spray concentration according to the instructions in Table 1. Choose the spray concentration for the length of protection required.

Apply as a thorough cover spray or dip the plants before shipping and transplanting. Use an adequate spray volume to wet the leaves and stems. Spray the undersides of the leaves and apply to the drip point. Do not spray or dip the roots of the transplants.

#### SOIL MOISTURE CONSERVATION

**TO CONSERVE THE SOIL MOISTURE FOR GROUNDCOVERS, VINES, BEDDING PLANTS, FLOWERS, AND VEGETABLES:** LeafGuard MC3 can supplement water management practices. Apply as a foliar application to the established plants before the expected period of soil moisture stress. Apply one (1) gallon of LeafGuard MC3 per acre (Table 3). Spray volumes of 50 gallons per acre are recommended to ensure uniform coverage. Repeat applications as required to maintain the coverage of the new plant growth.

Band sprays and directed sprays to the rows or plants are preferred, and these methods provide complete coverage. A broadcast application with a uniform distribution and thorough coverage is acceptable.

Table 3. Recommendations for groundcovers, bedding plants, flowers, and vegetables.		
	Spray concentration of LeafGuard MC3 for:	Amount of LeafGuard MC3 for:
	Survival against transplant shock.	Conservation of soil water and plant maintenance.
<b>Groundcovers and Vines:</b> (Ajuga, Honeysuckle, Ivy, Periwinkle, Juniper, Sedum, Pachysandra, Euonymus, Hosta)	2.5 - 5.0 %	1.0 Gallon/acre
<b>Bedding plants:</b> Flowers (Annual and Perennial); Vegetables (Tomatoes, Peppers, and others)		

#### INDOOR PLANTS

**TO EXTEND THE IRRIGATION INTERVAL OF INDOOR PLANTS:** Periodic applications of LeafGuard MC3 can reduce the water requirements and extend the irrigation intervals of plants maintained in greenhouses, nurseries and other indoor sites. Mix one (1) gallon of LeafGuard MC3 with 40 gallons of water. Or, prepare a 2.5% (v/v) spray concentration according to the instructions in Table 1. Repeat the application at 90-120 day intervals as needed.

Apply as a thorough cover spray. Use an adequate spray volume to wet the leaves and stems. Spray the undersides of the leaves and apply to the drip point.

#### STORAGE AND DISPOSAL

**STORAGE:** Keep from freezing.

**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.

#### LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants only that the product is reasonably suited for the labeled use when applied according to the directions on the label.

Buyer assumes all responsibility for safety and use not in accordance with directions.

Distributed by:

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