



TRANSFILM[®] ANTITRANSPIRANT

**ANTI-TRANSPIRANT FOR
FLOWERS, SHRUBS,
VEGETABLE & FRUIT
TRANSPLANTS, TREES & TURF**

**AN EMULSION OF
POLYETHYLENES –
POLYTERPENES**

**KEEP OUT OF
REACH OF CHILDREN
CAUTION**

834/1297

MANUFACTURED BY
 **pbi/gordon**
CORPORATION
KANSAS CITY, MISSOURI 64101



READ THE ENTIRE LABEL FIRST.

INTRODUCTION

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

Transfilm is a mixture of polyethylenes and polyterpenes and forms an emulsion with water. Transfilm combines the features of a uniform film coverage on the leaves with the ease of use. Applications of Transfilm 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 Transfilm to deciduous trees, conifers, container stock, and bedding plants. Antitranspirants such as Transfilm 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. Applications of Transfilm before transplanting help the transplant when the root system cannot compensate for the amount of water loss by transpiration. So, the benefits of Transfilm are that transplant shock can be decreased, plant losses can be minimized, and the transplant season can be extended.

DIRECTIONS FOR USE

SPRAY PREPARATION:

Check the spray tank and the equipment for cleanness before preparing the spray solution. Transfilm should be mixed with water. Do not combine pesticides with Transfilm 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 Transfilm, 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.

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 Transfilm 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 Transfilm mixed with 40 gallons of water.

5.0% = one (1) gallon of Transfilm mixed with 20 gallons of water.

10.0% = one (1) gallon of Transfilm mixed with 10 gallons of water.

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.

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 Transfilm 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 Transfilm 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

To reduce transplant shock to conifers, broadleaf evergreens, deciduous trees and shrubs: Mix one (1) gallon of Transfilm 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 protection 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.

To reduce winter desiccation on conifers and broadleaf evergreens: Mix one (1) gallon of Transfilm 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.

Transfilm will maintain the plant vigor throughout the winter.

To reduce the drying of Christmas trees and holiday greenery: Transfilm can reduce the drying of Christmas trees and holiday greenery and preserve the plant quality. Mix one (1) gallon of Transfilm 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.

Table 2. Recommendations for conifers, broadleaf evergreens, deciduous trees and shrubs, Christmas trees, and holiday greenery.		
	Spray Concentration of Transfilm for:	
	• Survival against transplant shock. • Reduction of water loss during transit.	• Conservation of water. • Reduction of desiccation during winter and storage.
<i>Conifers:</i> (Arborvitae, Cedars, Cypresses, Fir, Hemlock, Juniper, Pines, Spruce, and Yew)	2.5 - 5%	5 - 10%
<i>Broadleaf Evergreens:</i> (Abelia, Anise, Azalea, Barberry, Boxwood, Camellia, Cotoneaster, Euonymus, Gardenia, Heather, Holly, Jasmine, Leucothoe, Magnolia, Oleander, Photinia, Pittosporum, Privet, Rhododendron)	2.5 - 5%	5 - 10%
<i>Deciduous Trees & Shrubs:</i> (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, Redbud, Rose, Spirea, Sycamore, Viburnum, Weigelas)	2.5 - 5%	—
<i>Christmas Trees & Greenery</i>	—	2.5%

To reduce the transplant shock to groundcovers, vines, bedding plants, flowers, and vegetables: Mix one (1) gallon of Transfilm 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.

To conserve the soil moisture for groundcovers, vines, bedding plants, flowers, and vegetables: Transfilm 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 Transfilm 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 Transfilm for:	Amount of Transfilm for:
	• Survival against transplant shock.	• Conservation of soil water and plant maintenance.
<i>Groundcovers and Vines:</i> (Ajuga, Honeysuckle, Ivy, Periwinkle, Juniper, Sedum, Pachysandra, Euonymus, Hosta). <i>Bedding Plants:</i> <i>Flowers</i> (Annual and Perennial); <i>Vegetables</i> (Tomatoes, Peppers, and others).	2.5 - 5.0%	1.0 Gallon/Acre

To reduce the desiccation of cut and rolled sod: Transfilm 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 Transfilm per acre. Spray volumes of 50 gallons per acre are recommended to ensure uniform coverage.

To reduce the winter desiccation of fine turfgrass (bentgrass 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 Transfilm per acre with spray volumes of 20 gallons per acre. Or, apply 8 fl. oz. of Transfilm per 1,000 sq. ft. of turfgrass with spray volumes of 0.5-2.0 gallons per 1,000 sq. ft.

Spray additives for turfgrass fungicides: Fall applications of Transfilm 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. Transfilm is not a fungicide, but combinations of Transfilm and fungicides applied in the late fall will provide preventive and curative protection. We recommend two applications of Gordon's TEREMEC® SP Turf Fungicide plus Transfilm during the late fall and after the first mid-winter thaw for protection from Typhula blight.

Use Transfilm at 0.25-0.50% (v/v) in the final spray mixture with Gordon's TEREMEC® SP Turf Fungicide at the recommended rate. This additive concentration is equal to 1.0-2.0 quarts of Transfilm per 100 gallons of spray solution or 0.3-0.6 fl. oz. of Transfilm per 1.0 gallon of spray solution. Do not exceed the Transfilm concentration of 0.5% (v/v) of the spray volume.

Transfilm can be tank-mixed with other fungicides, but observe all Directions for Use and Precautionary Statements as specified on the container labels of each product.

To extend the irrigation interval of indoor plants: Periodic applications of Transfilm 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 Transfilm 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 or 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: (Plastic containers) 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 chemical composition of this product conforms to the ingredient statement given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use.

THE MANUFACTURER NEITHER MAKES NOR INTENDS ANY OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE EXPRESSLY DISCLAIMED. This limited warranty does not extend to the use of the product inconsistent with label instructions, warnings or cautions, or to use of the product under abnormal conditions such as drought, excessive rainfall, tornadoes, hurricanes, etc. These factors are beyond the control of the manufacturer or the seller. Any damages arising from a breach of the manufacturer's warranty shall be limited to direct damages, and shall not include indirect or consequential damages such as loss of profits or values, except as otherwise provided by law.

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