

# TRANSFILM® ANTI-TRANSPIRANT

& STICKER

# AN EMULSION OF POLYETHYLENES – POLYTERPENES

Principal Functioning Agents:

Polymeric terpenes 13.54%
Oxidized polyethylene 14.93%
Constituents Ineffective as Spray Adjuvants 71.53%

TOTAL 100.00%



#### **GENERAL INFORMATION**

Transfilm is an improved anti-transpirant 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. Anti-transpirants such as Transfilm are applied to leaf surfaces to relieve the plant from water stress during storage, shipping, and establishment. For example, bareroot and burlap transplants may suffer transplant shock because the water absorption rate of the roots cannot match the transpiration rate. Foliar 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.

Transfilm may decrease the blue color of plants with blue-green leaves or needles such as Colorado Blue Spruce and Blue Rug Juniper. Once the blue color has been reduced, it will not return to leaves and needles which were treated. The color of leaves and needles which emerge after treatment will not be affected. Treated plants are not otherwise harmed.

#### MIXING INSTRUCTIONS AND CLEAN-UP

#### **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  $\frac{1}{2}$  to  $\frac{3}{4}$  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.

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 to 10% concentrations (v/v) with water for foliar applications.

Spray Solutions,	Amount of TransFilm required for:			
Gallons	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.

qual 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.

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**

# WINTER DESICCATION

TO REDUCE WINTER DESICCATION ON CONIFERS AND BROADLEAF EVERGREENS: Mix one (1) gallon of TRANSFILM with 10 to 20 gallons of water (Table 2). Or prepare a 5.0 to 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.

# **CHRISTMAS TREES AND GREENERY**

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.

# **TURFGRASS**

TO REDUCE THE DESICCATION OF CUT AND ROLLED SOD: TRANSFILM can reduce the water loss of rolled sod during transit and

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 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 Transfilm per acre with spray volumes of 20 to 80 gallons per acre. Or, apply 8 fl. oz. of Transfilm per 1,000 sq. ft. of turfgrass with spray volumes of 0.5 to 2.0 gallons per 1,000 sq. ft.

**REDUCE DEW FORMATION ON TURFGRASS:** Dew formation can promote the development of turfgrass diseases. While Transfilm is not a fungicide, it has the ability to reduce dew formation and leafblade wetness. Apply 2 gallons of Transfilm per acre with spray volumes of 20 to 80 gallons per acre. Or, apply 6.4 fl.oz. of Transfilm per 1,000 sq.ft. of turfgrass with spray volumes of 0.5 to 2 gallons per 1,000 sq.ft.

SPRAY ADDITIVE WITH TURFGRASS FUNGICIDES: TRANSFILM may be applied in a tank mix with fungicides (snow mold fungicides, for example). TRANSFILM will increase the adherence of the fungicide to the leaf surface.

Use Transfilm at 0.25% to 0.5% (v/v) in the final spray mixture with fungicides. This concentration is equal to 1 to 2 quarts of Transfilm per 100 gallons of spray solution or 0.3 to 0.6 fl.oz. of Transfilm per 1 gallon of spray solution. Do not exceed 0.5% (v/v) of the spray solution. Observe all Directions for Use and Precautionary Statements as specified on the container labels of each fungicide.

#### TRANSPLANT SHOCK

TO REDUCE TRANSPLANT SHOCK TO CONIFERS, BROADLEAF EVERGREENS, DECIDUOUS TREES AND SHRUBS: Mix one (1) gallon of TRANSFILM with 20 to 40 gallons of water (Table 2). Or, prepare a 2.5 to 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.

	Spray Concentration of TRANSFILM for:		
	Survival against transplant shock.	Conservation of water     Reduction of	
	<ul> <li>Reduction of water loss during transit.</li> </ul>	desiccation during winter and storage.	
Conifers: (Cedars, Cypresses, Fir, Hemlock, Juniper, Pines, Spruce, and Yew)	2.5 to 5%	5 to 10%	
Broadleaf Evergreens: (Abelia, Anise, Azalea, Barberry, Boxwood, Camellia, Cotoneaster, Euonymus, Gardenia, Heather, Holly, Jasmine, Leucothoe, Magnolia, Oleander, Photinia, Pittosporum, Privet, Rhododendron)	2.5 to 5%	5 to 10%	
Deciduous Trees & Shrubs: (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 to 5%	_	
Christmas Trees & Greenery	_	2.5%	

\*Not for use on trees/plants grown for food.

TO REDUCE THE TRANSPLANT SHOCK TO GROUNDCOVERS, VINES, BEDDING PLANTS, AND FLOWERS: Mix one (1) gallon of TRANSFILM with 20 to 40 gallons of water (Table 3). Or, prepare a 2.5 to 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.

#### **SALT AIR DAMAGE**

Thoroughly wet foliage, then apply using 1 gallon of TRANSFILM in 20 to 40 gallons of water or 2.5 to 5% (v/v) spray concentration according to Table 1.

#### SOIL MOISTURE CONSERVATION

TO CONSERVE THE SOIL MOISTURE FOR GROUNDCOVERS, VINES, BEDDING PLANTS, AND FLOWERS: 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, and flowers.*					
	Spray Concentration of TRANSFILM for:	Amount of TRANSFILM for:			
	Survival against transplant shock.	Conservation of soil water and plant maintenance.			
Groundcovers and Vines: (Ajuga, Honeysuckle, Ivy, Periwinkle, Juniper, Sedum, Pachysandra, Euonyumus, Hosta).	2.5 to 5.0%	1.0 Gallon/Acre			
Bedding Plants: Flowers (Annual and Perennial).					

# **INDOOR PLANTS**

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 to 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:** 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

**IMPORTANT:** Read this LIMITED WARRANTY AND DISCLAIMER before buying or using this product. By opening and using this product, buyer and all users agree to accept the terms of this LIMITED WARRANTY AND DISCLAIMER in their entirety and without exception. If the terms are not acceptable, return this product unopened immediately to the point of purchase, and the purchase price will be refunded in full.

It is impossible to eliminate all risks inherently associated with use of this product. Damage to the treated article, ineffectiveness, or other unintended consequences can result from use of the product under abnormal conditions such as weather, presence of other materials, or the manner or use of application, etc. Such factors and conditions are beyond the control of the manufacturer, and BY PURCHASING AND USING THIS PRODUCT THE BUYER AND ALL USERS OF THIS

**PRODUCT AGREE TO ACCEPT ALL SUCH RISKS.** Buyer and all users further agree to assume all risks of loss or damage from the use of the product in any manner that is not explicitly set forth in or that is inconsistent with label instructions, warnings and cautions.

The manufacturer warrants only that this product conforms to the chemical description given on the label, and that the product is reasonably suited for the labeled use when applied according to the Directions for Use, subject to the inherent risks described below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, 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 HEREBY EXPRESSLY DISCLAIMED.

THE EXCLUSIVE REMEDY OF BUYER AND ALL USERS OF THIS PRODUCT, AND THE EXCLUSIVE LIABILITY OF THE MANUFAC-TURER, FOR ANY AND ALL LOSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OF HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OR THE REPAYMENT OF THE PURCHASE PRICE FOR THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO CASE SHALL THE MANUFACTURER BE LIABLE FOR INCIDEN-TAL, CONSEQUENTIAL, OR SPECIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THE PRODUCT. The Manufacturer must be promptly notified in writing of any claims, whether based in contract, tort, negligence, strict liability, or otherwise, to be eligible to receive either remedy stated above.

The terms of this LIMITED WARRANTY AND DISCLAIMER cannot be varied by any written or verbal statements or agreements at the point of sale or elsewhere. No employee or agent of the manufacturer or seller is authorized to vary or exceed the terms of this LIMITED WARRANTY AND DISCLAIMER in any manner.

Transfilm® is a registered trademark of PBI-GORDON CORPORATION.

834/10-2013



An Employee-Owned Company
MANUFACTURED BY
PBI/GORDON CORPORATION
1217 WEST 12TH STREET
KANSAS CITY, MISSOURI 64101
www.pbigordon.com

ATTENTION: This specimen label is provided for informational use only. This pesticide product may not yet be available for sale in your state or area. The information found in this label may differ from the information found on the product label you are using. Always follow the instructions for use and precautions on the label of the pesticide you are using.