

# Anti-Stress 2000®



**ANTI-STRESS 2000®** is a blend of non-toxic, water soluble polymers that can minimize the damage of climate related stress. Applied as a biodegradable foliar spray, *Anti-Stress 2000®* provides a unique semi-permeable membrane on the leaf surface. *Anti-Stress 2000®* can reduce the effects of **excessive heat, drought, drying winds, rapid weather changes, transplant shock, frost and freeze**. During its 30 to 60 day active cycle, this elastic coating dramatically reduces transpiration and does not interfere with normal stomatic activities or photosynthesis.

A significant benefit of applying *Anti-Stress 2000®* is the savings of water within the plant canopy. An application provides a coating which assists the plant to maintain a more consistent moisture level in the plant cells under the following stressful conditions:



### HEAT / SUNBURN

Heat related damage occurs when leaves transpire more rapidly than the roots can uptake water. As the water content of the plant cells is reduced the dehydration of cells in leaves, flower and fruit leads to wilting, sunburn and a reduction in plant growth.

The *Anti-Stress 2000®* membrane reduces the transpirational loss rate which helps reduce the negative effects of high heat and intense sunlight.



### SOIL MOISTURE VARIATIONS

The premature drying of soil caused by heat, wind, light soil or irrigation intervals can cause plant stress. Plants treated with *Anti-Stress 2000®* will take more time to develop wilt conditions than untreated plants. Often irrigation can be reduced by **up to 30%**.



### DRYING WINDS

Hot and cold winds pull moisture from plant cells. As moisture is reduced, the plant becomes susceptible to damage. *Anti-Stress 2000®* forms a barrier against these conditions.

### FROST AND FREEZE

Give your plants an extra 4° - 6°F buffer against damaging cold. By retaining higher moisture within the plant cells and by providing a physical barrier between sensitive plant tissue and ice crystal formations, *Anti-Stress 2000®* effectively reduces frost and freeze danger for tropicals, ornamentals, vegetables, citrus, trees, vines, and bloom & buds.



### TRANSPLANT SHOCK / PLANTING

The *Anti-Stress 2000®* membrane will lessen the impact of low humidity, greater temperature variation, and wind when plants are removed from ideal growing conditions. Transplant shock often occurs when the root system of a newly planted specimen cannot adequately supply its water needs. The time necessary for a plant to overcome this condition can result in lost growth potential, reduced survival rates and long term physiological damage. Treating well watered plants prior to transplanting or at the time of planting will increase the retention of water in the canopy of the plant. This retention improves the water balance and results in less stress and improved genetic expression.



POLYMER AG, LLC

polymerag.com • 800.678.7377 • info@polymerag.com

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# APPLICATION RATES for **Anti-Stress 2000®**

PLANT	PARTS WATER	PARTS ANTI-STRESS	PERCENT OF ANTI-STRESS IN WATER	APPLICATION
<b>BAREROOT</b>				
Fruit & Nut Trees, Roses	0 - 2	1	Full Strength – 33%	To reduce dry-out, as an alternative for wax.
<b>BEDDING PLANTS</b>				
Flowering and Vegetable	20	1	4.8%	Before shipping and transplanting. Before frost and freeze danger. Before exposure to drought and extensive heat.
<b>BLOOMING PLANTS</b>				
Potted Floral, Holiday, Color, Poinsettias, Begonias, Chrysanthemum, etc.	40	1	2.4%	Lessen premature dry-out. May extend blooming time. Prior to shipping.
<b>CHRISTMAS TREES</b>				
Seedlings	20	1	4.8%	Transplanting. Preserve freshness. Reduce needle drop. Reduce premature dry-out.
Container Grown	30	1	3.2%	
Field Grown	30	1	3.2%	
Cut Greens	20	1	4.8%	
<b>EVERGREEN</b>				
Citrus	30	1	3.2%	Before frost and freeze danger. Before exposure to drought and extensive heat.
Ornamentals	30	1	3.2%	
<b>GROUND COVERS</b>				
All Varieties	30	1	3.2%	Prior to shipping.
<b>PALMS</b>				
Container Grown	30	1	3.2%	To lessen wind damage and browning of tips.
Field Grown	30	1	3.2%	
<b>ROSES</b>				
Container Grown	30	1	3.2%	For grafting and shipping. Before frost and freeze danger.
Field Grown	30	1	3.2%	
Bareroot	0 - 2	1	Full Strength – 33%	Before exposure to drought and extensive heat. As an alternative for wax.
Dormant Potted	0 - 2	1	Full Strength – 33%	
<b>SCULPTURED PLANTS</b>				
Bonsai	30	1	3.2%	Before transplanting. After trimming.
Topiary	30	1	3.2%	
<b>TREES</b>				
Container Grown	30	1	3.2%	Before frost and freeze danger. Before exposure to drought and extensive heat. For shipping. Before transplanting.
Field Grown	30	1	3.2%	
<b>TROPICALS</b>				
Outdoor	20	1	4.8%	Prior to frost and freeze danger. Reduce wind damage. Plant shine. Extend maintenance cycle.
Indoor	30	1	3.2%	
Low Light/Shade	40	1	2.4%	
<b>TURF GRASS</b>				
Plugs/Sprigs	20	1	4.8%	Before cutting sod for harvest. For premature dry-out. Extend shelf life.
Sod	20	1	4.8%	

20: 1 / 4.8%		30:1 / 3.2%		40:1 / 2.4%	
Gallons of Water	Volume of Anti-Stress 2000®	Gallons of Water	Volume of Anti-Stress 2000®	Gallons of Water	Volume of Anti-Stress 2000®
1	6.4 oz.	1	4.25 oz.	1	3.2 oz.
5	32 oz.	5	21.3 oz.	5	16 oz.
20	1 Gallon	20	85.25 oz.	20	0.5 Gallons
100	5 Gallons	100	3.33 Gallons	100	2.5 Gallons