

Anti-Stress 550®

ANTI-STRESS 550® 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 550®* provides a unique semi-permeable membrane on the leaf surface. *Anti-Stress 550®* 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 550®* 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:

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 550®* effectively reduces frost and freeze danger for tropicals, ornamentals, vegetables, trees, vines, and bloom & buds.



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 550®* membrane reduces the transpirational loss rate which helps reduce the negative effects of high heat and intense sunlight.

TRANSPLANT SHOCK / PLANTING

The *Anti-Stress 550®* 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.

DRYING WINDS

Hot and cold winds pull moisture from plant cells. As moisture is reduced, the plant becomes susceptible to damage. *Anti-Stress 550®* forms a barrier against these conditions.

SOIL MOISTURE VARIATIONS

The drying of soil caused by heat, wind, light soil or irrigation intervals can cause plant stress. Plants treated with *Anti-Stress 550®* will take more time to develop wilt conditions than untreated plants. Often irrigation can be reduced by **up to 30%**.



SHIPPING: By assisting in moisture retention, *Anti-Stress 550®* can reduce losses due to shipping.



The effectiveness of *Anti-Stress 550®* depends on the concentration of the product to water (dilution rate) and coverage of the leaf surface. Best results will likely be obtained when *Anti-Stress 550®* is applied 24 to 48 hours before the stress of heat, wind, frost/freeze, transplant shock or reduced irrigation occurs. If not possible to apply within this time frame, good results may be obtained as soon as the spray is dry. *Anti-Stress 550®* does not require registration by the EPA or special permits to apply.

Request Anti-Stress 550® by name from your local Ag Retailer

POLYMER AG, LLC

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Helping growers for over 20 years

APPLICATION RATES for **Anti-Stress 550®**

| PLANT | PARTS WATER | PARTS ANTI-STRESS | PERCENT OF ANTI-STRESS IN WATER | APPLICATION |
|---|-------------|-------------------|---------------------------------|--|
| BAREROOT | | | | |
| Fruit & Nut Trees, Roses | 0 - 2 | 1 | Full Strength – 33% | To reduce dry-out, as an alternative for wax. |
| BEDDING PLANTS | | | | |
| Flowering and Vegetable | 20 | 1 | 4.8% | Before shipping and transplanting. Before frost and freeze danger. Before exposure to drought and extensive heat. |
| BLOOMING PLANTS | | | | |
| Potted Floral, Holiday, Color, Poinsettias, Begonias, Chrysanthemum, etc. | 40 | 1 | 2.4% | Lessen premature dry-out. May extend blooming time. Prior to shipping. |
| CHRISTMAS TREES | | | | |
| 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% | |
| EVERGREEN | | | | |
| Citrus | 30 | 1 | 3.2% | Before frost and freeze danger. Before exposure to drought and extensive heat. |
| Ornamentals | 30 | 1 | 3.2% | |
| GROUND COVERS | | | | |
| All Varieties | 30 | 1 | 3.2% | Prior to shipping. |
| PALMS | | | | |
| Container Grown | 30 | 1 | 3.2% | To lessen wind damage and browning of tips. |
| Field Grown | 30 | 1 | 3.2% | |
| ROSES | | | | |
| 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. |
| Dormant Potted | 0 - 2 | 1 | Full Strength – 33% | As an alternative for wax. |
| SCULPTURED PLANTS | | | | |
| Bonsai | 30 | 1 | 3.2% | Before transplanting. After trimming. |
| Topiary | 30 | 1 | 3.2% | |
| TREES | | | | |
| 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% | |
| TROPICALS | | | | |
| 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% | |
| TURF GRASS | | | | |
| 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 550® | Gallons of Water | Volume of Anti-Stress 550® | Gallons of Water | Volume of Anti-Stress 550® |
| 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 |