Anti-Stress —550®—

Reduces Moisture Loss in Plants During Hostile Climate Conditions

Frost & Freeze | High Temperatures | Drying Winds

Drought Conditions | Transplanting | Sudden Climate Changes

CONCENTRATE
for Foliar Application

Net 2.5 Gallons (9.46L)

Active Ingredient:
44% Acrylic Polymer

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Anti-Stress 550® is a water-based polymer coating which creates a semi-permeable elastic membrane that reduces moisture loss in plants during hostile climate conditions. The membrane is gas permeable and remains flexible, enabling the plant to continue normal stomatic and growth activities.

KEYS TO SUCCESS

» COVERAGE: Anti-Stress 550® only works on the plant material that it covers. Plant material that has not been sprayed will not receive any direct benefits. Anti-Stress 550® is most effective when applied with enough water for Anti-Stress 550® to thoroughly cover the entire leaf surface, covering both the upper and lower leaf surfaces.

» CONCENTRATION: The benefits of Anti-Stress 550® are based on the density of the polymers that coat the plant surface. Best results will be achieved with dilution ratios between 20:1 and 40:1 (4.8%- 2.4% solution). In some applications, such as dilute spray methods, results may be achieved at 100:1 (1.0% solution). Using less than one gallon of Anti-Stress 550® per 100 gallons of water will rarely yield a benefit.

» Anti-Stress 550® applied at a 20:1 ratio (4.8% solution) provides five times more polymer coating on the plant surface than a 100:1 dilution rate (1.0% solution). A thicker polymer coating, which is achieved by using a higher concentration, will result in a more productive environment for most plants during climate stresses.

» **NOTE**: When using Anti-Stress 550®, variables such as plant variety, size and age, climate conditions, and water availability, combined with the different protocols used in the planting, growing, transplanting, establishment, storage and shipping of plants, trees and shrubs, make it difficult to recommend an exact application rate. With over 25 years of grower experience, university and research lab testing, it is not possible to provide more specific recommendations than stated. We recommend starting at the lowest recommended rate and increasing the amount of Anti-Stress 550® until the desired result is achieved. For some tender plants or under mild conditions testing at less than the recommended rate may yield the desired result.

DIRECTIONS FOR USE

- For thorough mixing of Anti-Stress 550®, the mixing water should be above 40° F.
- Anti-Stress 550® must be applied when weather conditions will allow for the product to completely dry before periods of frost and freeze occur.
- When plants/trees/sod are in dehydrated conditions, water thoroughly and provide time for take-up of water before applying Anti-Stress 550® .
- If applied to edible foodstuff, last application should provide sufficient time (30-45) days for product to degrade prior to harvest. The time period is not applicable to those food stuffs which are subjected to cleaning processes.
- Not subject to wash off by rain or irrigation. Do not apply if weather conditions or irrigation schedules will not permit adequate time for complete drying.
- Anti-Stress 550® will remain effective 30 - 45 days. New growth will need to be sprayed.

METHODS OF APPLICATION

- Anti-Stress 550® lends itself to most types of conventional farm, orchard, or ground spray equipment, including helicopters. Fixed wing may not provide sufficient coverage.
- Small droplet size will provide the best coverage.
- Nozzle size and pressure selection should be such as to dispense Anti-Stress 550® over the entire plant surface.
- Effectiveness of Anti-Stress 550® depends on temperature variants, wind conditions, concentration dilutions, application equipment and types of plant, tree or grass on which the product is applied.

APPLICATION RATES

- Recommended Rate: A 1% - 5% solution (1 gallon of Anti-Stress 550® per 100 gallons of water up to 1 gallon of Anti-Stress 550® per 20 gallons of water).
- When dilute spraying is desired, add 1 quart of concentrate to 25 gallons of water, which is a 1% solution.
- The amount of water sufficient to cover the foliage will always determine the amount of product to be used.

MIXING INSTRUCTIONS

- Anti-Stress 550® is a concentrate to be mixed with water prior to application.
- To reduce foaming, mix recommended amount of Anti-Stress 550® after desired amount of water has been pumped into mixing tank.
- When using an anti-foaming agent, add it to the water first before adding Anti-Stress 550®.
- When mixing with hard water a spreader may be needed to prevent beading.
- For mixing purposes, the **pH** factor in the tank must be within the **5 to 8** range. When in doubt, perform a standard jar test with a small amount of concentrate and water to determine if the materials blend. If the materials separate, the pH factor is not compatible.
- Product may need to be poured through a screen to filter any film that may have formed around the top of the bottle.
- Residues from some chemicals, especially calcium and magnesium, may cause solids to separate from water. Evidence of this occurrence will appear as "cottage cheese" or small bits of whitish material floating on the surface foam and collecting in filters. Correct this problem by cleaning spray equipment with a commercial neutralizer sold specifically for this purpose.
- DO NOT MIX WITH HIGH ACID OR HIGH ALKALINE FORMULATIONS, CALCIUM OR MAGNESIUM.
- Never spray Anti-Stress 550® from any equipment (tank, hoses, nozzles) which has previously been used in herbicide application unless the equipment has been neutralized with a commercial product sold exclusively for this purpose. Failure to neutralize may cause plants to experience herbicide burn.

ADDITIONAL INFORMATION

- Anti-Stress 550® may enhance chemicals when tank mixed.
- Do not use with any silicone based spreaders.
- Keep unused containers of concentrate tightly sealed at all times.
- **DO NOT FREEZE**
- Do not store in direct sunlight.
- Best used in 1 year, when properly stored.

APPLES - as needed, including:
- Apply a 1% - 5% solution at bud break to first bloom and at late green cluster.

AVOCADOS - as needed, including:
Summer Application
- Apply a 1% - 2% solution in late May.
- Reapply in mid-July

Winter Application
- Apply a 1% - 2% solution prior to onset of potentially damaging temperatures.

BLUEBERRIES - as needed, including:
- For frost and freeze apply a 2% - 5% solution before threat occurs.
- At straw stage apply a 2% - 4% solution.
- At late summer flush apply a 1% - 3% solution.

CHERRIES - as needed, including:
- For frost and freeze to buds and blooms, apply a 1% - 5% solution before threat occurs.
- To reduce splitting of fruit during exposure to rain or excessive moisture, apply a 1% - 2% solution before or at straw stage.
- Post harvest apply a 1% - 2% solution for heat tolerance.

CITRUS - as needed, including:
- For frost and freeze, apply a 1% - 2% solution before the threat occurs.
- To reduce the effects of heat stress, apply a 1% - 2% solution before temperatures exceed 97° F.
- Reapply at 30 - 45 day intervals, as needed, for maximum benefits.
- Apply at any time if additional coating is needed due to extreme weather conditions.

GRAPES - as needed, including:
- For frost and freeze apply a 1% - 5% solution at 25 - 50% bloom; reapply 21 days after initial application; followed with a third spray 21 days after second application.

NUT CROPS : Almonds, Pecans, Pistachios, Walnuts - as needed, including:
- For heat stress and water stress, apply a 1% - 2% solution at bud break to first bloom.
- Reapply a 1% - 2% solution every 30 - 45 days as needed through harvest.

OLIVES - as needed, including:
Post Harvest
- Apply a 1% - 2.5% solution tank mixed with copper or after copper application.

Winter/Spring
- For frost and freeze reapply a 1% - 2.5% solution before threat occurs.

PEARS - as needed, including:
- Apply a 1% - 2% solution at bud break to first bloom.
- Reapply a 1% - 2% solution after petal fall and fruit set.

POMEGRANATES - as needed, including:
- For frost and freeze apply a 1% - 5% solution before threat occurs.
- Reapplication of a 1% - 5% is recommended at leaf out and when fruit is less than 1".
- For heat apply a 1% - 5% prior to temperatures reaching 97° F.

ROW CROPS - as needed, including:
- Apply a 1% - 2% solution at bud break to first bloom.

STONE FRUIT - as needed, including:
- Apply a 1% - 5% solution as needed at bud-burst, after petal fall and fruit set, or during growing stages.

STRAWBERRIES - as needed, including:
- Apply a 1% - 5% solution at leaf development, late bud/early flower stage, and fruit set as needed.

TOMATOES - as needed, including:
- Apply a 1% - 5% solution at bud break to first bloom.
- Reapply a 1% - 5% solution at second and third bloom.

TRANSPLANTS - as needed, including:
- Spray or dip transplants as needed in a 5% solution before planting.

ALL OTHER CROPS - as needed, including:
- Apply a 1% - 5% solution, up to full strength as needed, by experience.

NURSERY APPLICATIONS

BARE ROOT - as needed, including:
- Spray or dip in a 3% solution to full strength to reduce dry-out as an alternative to wax. Application to exposed roots is recommended whenever possible. Rooting hormone applications may be applied after the application of Anti-Stress 550.

CHRISTMAS TREES - as needed, including:
- Apply a 1% - 5% as needed in late May with a re-application in July or first application in late June/early July, prior to temperatures rising above 95°.
- Apply a 5% solution to extend freshness and reduce needle drop.

ORNAMENTALS - as needed, including:
- Apply a 1% to 5% solution as needed every thirty days as needed for frost/freeze and heat stress.
- Apply a 2.5% - 5% solution prior to shipping.

PALMS / TROPICALS - as needed, including:
- For frost and freeze, apply a 2.5% - 5% solution before threat occurs.
- For wind desiccation and browning of tips, apply a 2.5% - 5% solution.

PROPAGATION - as needed, including:
- Spray or dip with a 10% solution or full strength.

ROSES - as needed, including:
- For container and field grown, apply a 2.5% - 5% solution before frost and freeze event, or prior to shipping.
- For planted dormant roses, apply a 3% solution to full strength as an alternative to wax.

VEGETABLES - as needed, including:
- Apply a 5% solution, 24 - 48 hours prior to planting.
- Apply a 3% solution, 7 - 10 days after bloom, then every 30 days.

LAWN/TURF- as needed, including:
- Apply a 2.5% - 5% solution after every third cutting and in stressed areas after thorough watering.

SOD - as needed, including:
- Apply a 3% - 5% solution before harvesting.

DILUTION RATES

Dilution Rate/Ratio	Gallons of Water	Gallons of Anti-Stress 550®
1% / 100:1	100	1
2% / 50:1	50	1
3% / 33:1	33	1
4% / 25:1	25	1
5% / 20:1	20	1

FOR EASE OF CLEAN UP

Exterior Tank:
- Prior to spraying, coat the exterior of equipment (tractor and fan) with a vinyl/rubber protectant or other release agent.
- If product dries on equipment, remoisten with water and remove with a pressure washer.

Interior Tank:
- Immediately after spraying rinse tank, hoses and nozzles thoroughly with water to flush all Anti-Stress 550® dilutions from equipment.
- When concentrate is spilled, flush area with water before drying for quick, easy clean up.
- For removal of dried product, soak in water, use pressure washer with hot water, if available.

Spillage on Clothing:
- Immediately wash product from clothing completely to avoid stains.

NONPLANT FOOD INGREDIENT
NON-TOXIC & BIODEGRADABLE

Read instructions carefully before using this product
KEEP OUT OF REACH OF CHILDREN

Manufactured By:
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