

# Raynox Plus®

## SUNBURN PROTECTANT

**Raynox Plus® Sunburn Protectant** is designed to protect fruit from sunburn browning. Under comparable environmental conditions, apple varieties vary in susceptibility to sunburn browning. In apples, for example, Cameo apples are highly susceptible to sunburn while Pink Lady apples are very tolerant. Other varieties, including Golden Delicious, Fuji, Granny Smith, Gala, Jonagold, Red Delicious and Braeburn, are intermediate in susceptibility.

**PRINCIPAL INGREDIENTS:** Contains 1,2-propanediol, zinc oxide and proprietary food grade ingredients.

### KEEP OUT OF REACH OF CHILDREN

#### HAZARD STATEMENTS

This chemical is considered non-hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### PRECAUTIONARY STATEMENTS

Observe good industrial hygiene practices. Wash thoroughly after handling this product. Wear protective clothing, chemical resistant gloves, and safety glasses.

#### FIRST AID STATEMENTS

**IF SWALLOWED:** Give large quantities of water. DO NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.

**IF ON SKIN:** Take off immediately all contaminated clothing. Wash skin with plenty of soap and water/shower, if skin still feels slippery continue washing. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**IF INHALED:** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**IF IN EYES:** Hold eye open and rinse cautiously with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes if easy to do, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.

CALL 800-892-0099 (24 HOURS) FOR EMERGENCY INFORMATION.

**PRODUCT MAY SETTLE DURING EXTENDED STORAGE; AGITATE OR MIX THOROUGHLY BEFORE USE. DO NOT STORE AT TEMPERATURES BELOW 45°F OR IN DIRECT SUNLIGHT.**

#### RECOMMENDATIONS FOR USE

##### FOR APPLES:

**TANK MIXES:** Data concerning the compatibility of Raynox Plus with other agricultural compounds are not available. Tank-mixing or use of Raynox Plus with any other product, including pesticides, foliar nutrients, water conditioners, and adjuvants shall be at the exclusive risk of the user, applicator and/or application advisor. DO NOT USE Raynox Water Softener with Raynox Plus.

**EVAPORATIVE COOLING / OVERHEAD IRRIGATION:** Raynox Plus should NOT be used with evaporative cooling or overhead irrigation until further testing is completed to establish its rainfastness.

##### Mixing:

1. Fill clean spray tank with ALL REQUIRED DILUTION WATER.
2. Mix contents of tank as you slowly add 2.5 gallons of Raynox Plus to water for each acre. You may dilute 2.5 gallons of Raynox Plus in 47.5 gal. water (1:20 ratio) or 2.5 gallons of Raynox Plus in up to 97.5 gal. water (1:40 ratio) depending on the desired spray volume to be applied per acre with your sprayer (see details below).

**APPLICATIONS:** Ground Application - Apply 50 to 100 gal./acre (gpa) finished spray by airblast or boom sprayer to the trees. Raynox Plus can be applied at either 100 gpa to both sides of the rows, or at 50 gpa to only the side exposed to afternoon sun. Spraying at 50 gpa on only the side exposed to afternoon sun will provide better sunburn protection. Regardless of the spray volume used (50 gpa or 100 gpa), be sure to apply 2.5 gallons of Raynox Plus per acre of trees. If your sprayer is calibrated to deliver 100 gpa when you spray both sides of each row, dilute 2.5 gal. of Raynox Plus in 97.5 gal. water. To spray only the side of row exposed to afternoon sun, use the same sprayer calibration, but dilute 2.5 gal of Raynox Plus in 47.5 gal. water.

Shut off half the nozzles on the sprayer, and apply 50 gal of spray volume (containing 2.5 gals of Raynox Plus) on the side of row exposed to afternoon sun. For best coverage, ground speed of sprayer should not exceed 2 MPH. Air temperature during application should not exceed 85°F.

**Aerial Application (Helicopter only)** - When applying Raynox Plus by helicopter, be sure proper application techniques are used to provide adequate coverage for optimum sunburn suppression. Apply Raynox Plus with well calibrated equipment which provides a uniform spray pattern for thorough coverage. A minimum of 17.5 gallons of diluted spray per acre is recommended for optimum performance. Failure to obtain adequate coverage on the fruit reduces the effectiveness of the product. Regardless of spray volume used, be sure to apply a minimum of 2.5 gallons Raynox Plus per acre of trees. Do not apply under windy and/or hot conditions. High speed winds induce drift and also disrupt spray patterns causing inconsistent coverage. High temperatures and dry conditions induce droplet evaporation and may induce marking of fruit from aerial application. Aerial applications when air temperature at the time of application is above 85°F or when maximum daily temperatures are expected to exceed 100°F are not recommended. Early morning applications, when temperature and wind speed are the lowest, are highly recommended. For more information regarding aerial helicopter applications of Raynox Plus, consult your Valent representative.

##### When to apply:

Apple fruit surface area expands very rapidly between 7 and 9 weeks after full bloom (WAFB). Most effective sunburn protection requires the first application at 7 WAFB with a second application 7 to 10 days later. The third application should be made 3 weeks later (i.e. 11 to 12 WAFB), and a fourth application should be applied 4 weeks later (i.e. 15 to 16 WAFB) on all but a few early maturing cultivars (e.g. Gala). Apples are most vulnerable to sunburn on clear, calm days with air temperatures that are generally above 85°F and with low humidity.

**CLEAN-UP:** Clean sprayer tank and nozzles immediately after use by adding clean water to the spray tank and spraying the water through the nozzles. If any product has dried on the sprayer, it may be necessary to clean with hot water and detergent.

##### REMOVAL OF RAYNOX RESIDUES FROM FRUIT

Apple packing-line bed brushes may sufficiently remove Raynox Plus residues from fruit. However, use of a mild detergent on the brush beds will aid in removing Raynox Plus residues.

##### STORAGE AND DISPOSAL

**STORAGE:** Store in a cool, dry area at room temperature above 45°F and below 90°F. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children and livestock.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

**Small Spills:** Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

**PRODUCT DISPOSAL:** Wastes resulting from the use of this product must be disposed on site or in accordance with local/regional/national/ or international regulations.

##### WARRANTY AND DISCLAIMER STATEMENT

To the extent consistent with applicable law, seller makes no warranty, express or implied, of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. To the extent consistent with applicable law, user assumes all risks of use, storage or handling not in strict accordance with accompanying directions.

Raynox Plus is a registered trademark of Valent U.S.A. LLC.

##### PRODUCT OF USA

Manufactured by PACE International LLC, Wapato, WA for Valent U.S.A., LLC

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