FOR USE ON GRAPES

General Information

GENERAL DIRECTIONS FOR USE ON GRAPES

Use only as directed. Read the label thoroughly and make sure it is understood before making applications. ProTone SG improves red color development in grapes.

Application Instructions:

- On grapes, S-ABA is known to accelerate and enhance the red color development of grape berries depending on cultivar, vineyard conditions, and growing region. One or more of the following benefits is often associated with treatment with S-ABA: improved fruit quality as a result of enhanced fruit color, earlier harvest, improved harvest management, and improved pack-out yield.

- In most cases color development resulting from ProTone SG application will be visible five to seven days after application.

- Undesired effects can result from any deviations from the label directions in the rates, timings, water volumes, or the adoption of untested spray mixes, when applying ProTone SG.

- To prepare the treatment solution, add the required amount ProTone SG to a spray tank about half-filled with water. Agitate while bringing the total volume of water to the required level. Mix thoroughly with agitation and bypass circulation to completely dissolve the ProTone SG, and then add surfactant. Discard any unused treatment solution at the end of each day following local, state or federal law.

- Use a non-ionic surfactant at the final adjuvant concentration directed by the adjuvant manufacturer. Use of an adjuvant will improve wetting and coverage of the grape bunches.

- Increased coloration of grape berries has been achieved with bunch directed sprays applied by calibrated commercial spray equipment. Apply ProTone SG in a sufficient amount of water to ensure uniform, thorough, but not excessive coverage of the grape bunches. Product efficacy requires that all bunches, and berries within

bunches, receive thorough and complete coverage. Adjust spray volumes to achieve thorough coverage based on vine size, spacing, trellis system, vine canopy, and spray equipment.

- Best results will be achieved from applications during the cooler parts of the day or night, avoiding the hottest period of the day. To maximize absorption and optimize product effectiveness, apply ProTone SG under slow drying conditions, e.g. early in the morning, in the evening or night (coolest daily temperatures, medium to high relative humidity, and no wind).Do not make applications during the day or early evening when the fruit is still hot.

- ProTone SG can enhance the red color of grape cultivars that have difficulty developing color and helps increase red color of grapes grown in poor coloring areas. However, under very poor color development conditions (e.g. excessively hot day and night temperatures, heavy crop load, poor growing conditions) application of ProTone SG may not give adequate red color development. Serious consideration is to be given, on a block-by-block basis, to any vineyard conditions (elevation, sun exposure, soil texture, growing condition, prevailing or anticipated weather patterns such as high temperature, drought or flood conditions, nutrient levels) or production practices (vine size, vine spacing, vine canopy, crop load, trellis system, pruning) that impact fruit color development.

- Under conditions where red color development of grapes is good, (e.g. growing areas with a history of good red color development, years in which there is good red color development, cultivars that already develop sufficient red color), application of ProTone SG will not provide significant additional red color or advance the harvest period.

- Do not apply ProTone SG to plants or fruit under stress (e.g. heat, water, disease, insect and nutrient). Injured or stressed plants or fruit will show a reduced response to ProTone SG.

- Do not overhead irrigate treated plants for at least 6 hours following application of ProTone SG.

- Do not apply ProTone SG if rain is expected within 6 hours of application.

- The proper application timing of ProTone SG is important to product performance. When applying ProTone SG, deviations from the label directions in the rates, timings, water volumes, or the use of untested spray mixes, may produce undesired

results.

Limitations, Restrictions, and Exceptions

GRAPES

Objective/ Benefit: Enhanced red coloration of grapes. Contact Valent Corporation for more information.

Application Instructions

Apply ProTone SG within the period from 1 week before veraison (50 percent of the target fruit has softened) until anticipated harvest of target fruit. Application timing varies depending on the cultivar, vineyard conditions, and grower objectives.

Spray Applications:

Apply 75 - 250 g of S-ABA per acre as a spray solution in a sufficient volume to achieve uniform and complete coverage of the grape bunches. In most cases 75 g S-ABA (one-half bottle of ProTone SG) to 150 g S-ABA (one bottle of ProTone SG) per acre per application will provide good results. In situations where greater color development is desired, use the higher S-ABA rate.

Early timing:

First application should be made between 1 week before veraison and 3 weeks after veraison. A single application made during this period has been shown to be effective to enhance grape berry color.

Late timing:

If additional color development is desired, up to three (3) applications of ProTone SG can be used. Multiple applications are expected to improve color on cultivars for which there is an extended period between veraison and harvest.

Apply to marketable clusters with significant green color. Fruit may need to remain on the vine for 2 to 3 additional weeks for harvestable color to develop. Fruit must be firm at time of application with the potential to remain firm until harvest.

Application:

Use bunch directed sprays that achieve thorough wetting of the fruiting zone.

Bunches need to receive uniform and complete coverage without runoff. The spray volume required will depend on the trellis system, the vine canopy size and management, and commercial spray equipment used. Spray volumes ranging from 80 – 200 gallons/A have been shown to be effective when applied under slow drying conditions.

Use of Adjuvants:

Use a non-ionic surfactant at the final surfactant concentration directed by the surfactant manufacturer to improve wetting and coverage of grape bunches.

Determining Optimal Rates:

Optimal ProTone SG rates will vary according to the desired color effect, growing conditions & practices, application technique, environmental conditions, variety & cultivar, plant vigor, vine canopy and crop load. Different varieties or cultivars of the same species respond differently to ProTone SG. For specific variety or cultivar information contact your Valent representative.With increasing temperature and lower humidity consider using the higher rates within the range given in the application rates, remembering not to apply to plants that are under stress.

Method
Directed
Rates
field_rates 0

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Restricted Entry Interval

4 hours

Timings
Apply within the period from 1 week before veraison (50 percent of the target fruit has softened) until anticipated harvest of target fruit.