



FOR USE ON GRAPES

ACTIVE INGREDIENT:

S-Abscisic Acid	20.0% w/w
OTHER INGREDIENTS	80.0% w/w
TOTAL	100.0% w/w

ProTone® SG contains a total of 20 g of S-Abscisic Acid (S-ABA) in 100 g of product. S-Abscisic Acid, commonly known as S-ABA, is a naturally occurring growth regulator found in plants. Application of *ProTone* SG (S-ABA) to grape berries causes enhanced coloration of the berries.

EPA Reg. No. 73049-461

EPA Est. No. 33762-IA-001

List No. 05710

INDEX:

- 1.0 First Aid
- 2.0 Precautionary Statements
 - 2.1 Hazards to Humans & Domestic Animals
 - 2.2 Personal Protective Equipment (PPE)
 - 2.3 User Safety Recommendations
 - 2.4 Environmental Hazards
- 3.0 Directions for Use
- 4.0 Agricultural Use Requirements
- 5.0 General Directions for Use on Grapes
 - 5.1 Application Instructions
 - 5.2 Compatibility With Other Agricultural Products
 - 5.3 Applications, Rates, and Timings
- 6.0 Conversion Table
- 7.0 Storage and Disposal
- 8.0 Warranty and Disclaimer Statement

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
If in eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
HOT LINE NUMBER	
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call toll-free 1-800-892-0099 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 800-6-VALENT (682-5368).</p>	

This label must be in the possession of the user at the time of pesticide application.

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards To Humans & Domestic Animals

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

2.2 Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks
- Protective eyewear

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

2.3 User Safety Recommendations

User should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

2.4 Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with the terms of the label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

CONTINUED

4.0 AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Long-sleeved shirt and long pants (or coveralls)
- Chemical resistant gloves (made of any waterproof material)
- Shoes plus socks
- Protective eyewear

5.0 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.

5.1 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.

5.2 Compatibility With Other Agricultural Products

Compatibility and performance data for *ProTone* SG with other agricultural products is not available.

Do not tank mix *ProTone* SG with compounds containing copper or iron ions. Do not tank mix *ProTone* SG with any product unless compatibility has been verified. If considering tank mixing *ProTone* SG with other products use the following **compatibility jar test** before mixing a whole tank:

Add water from the same water source to a clear glass or plastic jar. Add the pesticides in correct proportions. Mix thoroughly and let stand for a minimum 15 minutes. Separation, gelling, or generation of heat are all signs of incompatibility.

Even if a mix passes the jar test for compatibility, it is imperative to test it on a designated area to evaluate for phytotoxicity or ineffectiveness.

Always read and follow all label directions and precautions of each product. When using combinations of products the most restrictive of label limitations and precautions must be followed. Do not mix with any pesticide that has a prohibition against tank mixing. For further information consult your Valent agricultural specialist.

5.3 Applications, Rates, and Timings

Crop	Objective/ Benefit	Application Instructions
Grapes (Table Grapes, Juice Grapes, Wine Grapes)	Enhanced red coloration of grapes. Contact Valent Corporation for more information.	Apply <i>ProTone</i> 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 grams of S-ABA (375 to 1250 grams <i>ProTone</i> SG) per acre as a spray solution in a sufficient volume to achieve uniform and complete coverage of the grape bunches. In most cases 75 grams S-ABA (one-half bottle of <i>ProTone</i> SG) to 150 grams S-ABA (one bottle of <i>ProTone</i> 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 <i>ProTone</i> 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 <i>ProTone</i> 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 <i>ProTone</i> 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.		

CONTINUED

6.0 CONVERSION TABLE

Grams of S-ABA	Pounds of ProTone SG	Grams of ProTone SG
75	0.83	375
100	1.10	500
125	1.38	625
150	1.65	750
175	1.93	875
200	2.20	1000
225	2.48	1125
250	2.76	1250

7.0 STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Keep container tightly closed when not in use. Store product in a cool and dry place. Avoid extended storage conditions at temperatures above 25°C (77°F). Avoid exposure of product to light.

Pesticide Disposal: To avoid waste, use all material in this container by application according to label directions. If waste cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Handling: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling, if available or puncture and dispose of the container in a sanitary landfill, or by other procedures approved by state and local authorities.

8.0 WARRANTY AND DISCLAIMER STATEMENT

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

ProTone is a registered trademark of Valent BioSciences Corporation.

Products That Work, From People Who Care is a registered trademark of Valent U.S.A. Corporation.

© 2012 Valent BioSciences Corporation

Registered and Manufactured by:
Valent BioSciences Corporation
870 Technology Way
Libertyville, IL 60048

04-7152/R3 (Pkg. 04-6472/R4)

Distributed by Valent U.S.A. Corporation.
P.O. Box 8025
Walnut Creek, CA 94596-8025



For state registration and/or supplemental labels, please call or visit us online.

Products That Work, From People Who Care® | www.valent.com | 800-6-VALENT (682-5368)

Always read and follow label instructions.

© 2012 Valent BioSciences Corporation. All rights reserved. Printed in the U.S.A. 2012-PRT-0002 2/12 AV