

{Booklet Label}

SUMAGIC[®]
Plant Growth Regulator
COMMERCIAL

EMULSIFIABLE CONCENTRATE

FOR GREENHOUSE USE ONLY

Active Ingredient: UNICONAZOLE-P.....0.055%

Contains 1,2-benzisothiazolin-3-one at 0.019% as a preservative

READ THE LABEL BEFORE USING

REGISTRATION NUMBER: 25781
PEST CONTROL PRODUCTS ACT

CAUTION POISON

Valent Canada, Inc.
3-728 Victoria Road South
Guelph, ON N1L 1C6
(519) 767-9262
www.valent.ca

NET CONTENTS 1 - 4 LITRES

PRECAUTIONS

- KEEP OUT OF REACH OF CHILDREN
- Avoid contact with eyes, skin and clothing.
- Wash concentrate from skin or eyes immediately.
- Do not inhale fumes. Avoid breathing spray mist. Avoid spray drift.
- After use, wash hands and other exposed skin.
- Remove and wash contaminated clothing before reuse.
- When mixing, loading and applying the product, wear waterproof rain gear (e.g. Tyvek coveralls) with a hood, respirator with an organic chemical cartridge, chemical resistant gloves, goggles and rubber boots.
- Do not reenter treated area within 12 hours of application. If early reentry is required, then wear waterproof rain gear (e.g. Tyvek coveralls), respirator with an organic chemical cartridge, chemical resistant gloves and rubber boots.

ENVIRONMENTAL HAZARDS

This product demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable and/or the depth to the water table is shallow.

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: 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 centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

Note to Physicians: Emergency Information – call 1-800-892-0099.

TOXICOLOGICAL INFORMATION: Treat symptomatically.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

DIRECTIONS FOR USE

IMPORTANT NOTES

- SUMAGIC Plant Growth Regulator is an extremely active plant growth regulator. Extreme caution must be exercised in measuring, diluting and applying SUMAGIC Plant Growth Regulator. Excessive doses will result in severe growth retardation and possible adverse effects on flowering, plant appearance and marketability. Avoid spray drift onto non-target species.
- Apply to well-watered, vigorously growing plants. Do not mix with pesticides, fertilizers, or adjuvants.

PRECAUTIONS

- FOR GREENHOUSE USE ONLY.
- Do not apply SUMAGIC Plant Growth Regulator to any food crops not listed on the label.
- As this product is not registered for the control of pests in aquatic systems, do not use to control aquatic pests.
- Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes
- Do not allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.
- Do not reuse soil from plants treated with SUMAGIC Plant Growth Regulator.
- Do **NOT** use on cranesbill geranium (*Geranium spp*).
- It is recommended that SUMAGIC Plant Growth Regulator be applied during morning or late afternoon hours.
- SUMAGIC Plant Growth Regulator retards elongation almost immediately after application. Assessment of rate response can often be made about one week after treatment.
- For Poinsettias and Chrysanthemums only, if response to SUMAGIC Plant Growth Regulator is deemed to be inadequate following an initial application within the recommended rate range, a repeat application can be made.
- Differences in plant response to SUMAGIC Plant Growth Regulator due to plant surface area in relation to soil surface area are possible.
- Extreme temperatures can influence plant response to SUMAGIC Plant Growth Regulator. Within the recommended rate range, a higher rate may be required at higher temperatures than at low temperatures for the same effect.

GENERAL INFORMATION

SUMAGIC Plant Growth Regulator can be used to retard the growth of Poinsettias, Chrysanthemums, Easter Lilies and Geranium and Bedding Plant Species. Dilute with water according to the directions below. Make foliar applications with standard spray equipment. Effective dose is strongly dependent on the application volume. Rates expressed are based on a spray volume of 2 litres applied uniformly to 10 square metres of bench area. Low pressure and larger pressure droplets are recommended for best results.

Plant response to SUMAGIC Plant Growth Regulator is strongly influenced by cultural and environmental variables, such as growing media, water/fertilizer management, temperature, light, relative day and night temperatures, growing house composition, and other cultural practices. First time users of SUMAGIC Plant Growth Regulator should treat a limited number of plants at the lowest recommended rate. Rates may be adjusted within the recommended rate range as necessary. In particular, temperature can have a significant effect on the response from any given rate. Within the recommended rate range, a higher rate may be required at higher temperatures than at lower temperatures for the same effect.

SUMAGIC Plant Growth Regulator has been tested on a limited range of cultivars. Response to SUMAGIC Plant Growth Regulator has been determined to be influenced by genetic background. Growers should limit first use of SUMAGIC Plant Growth Regulator to a limited number of plants of each cultivar, prior to adoption as a cultural practice under their particular growing conditions.

POINSETTIA

Apply SUMAGIC Plant Growth Regulator as a foliar spray when the breaks are 3.5 to 5.0 cm in length (about 10 to 14 days after pinching). Use a rate of 4 to 16 mL/L (2 to 8 ppm) and apply uniformly at a spray volume of 2 litres per 10 square metres of bench area. Up to two repeat applications can be made at 7 day intervals until the desired growth characteristics are achieved. Bract size and diameter may be slightly reduced with treatment, and days to flowering may be delayed. Late season application (after short-day initiation) may have negative effects on bract size, plant quality, and marketability. **DO NOT APPLY TO POINSETTIAS AFTER THE INITIATION OF SHORT DAYS.**

CHRYSANTHEMUMS

Apply SUMAGIC Plant Growth Regulator as a foliar spray 7 to 14 days after pinching when the length of the breaks is 3.8 to 5.0 cm. Use a rate of 10 to 20 mL/L (5 to 10 ppm) and apply uniformly in a spray volume of 2 litres per 10 square metres of bench area. A single repeat spray can be applied 7 to 21 days after the initial application to increase the level of growth reduction. Two applications may have more effect than the same amount of product applied as a single treatment. Alternatively, a solution of 40 mL/L (20 ppm) can be applied in a spray volume of 2 litres per 10 square metres of bench area, but **DO NOT** make a repeat application following the 20 ppm spray.

EASTER LILIES

Apply SUMAGIC Plant Growth Regulator as a foliar spray when shoots are 7.5 cm tall. Use a rate of 6 to 60 mL/L (3 to 30 ppm) and apply uniformly in a volume of 2 litres per 10 square metres of bench area. A single repeat spray of 3 to 5 ppm may be applied 2 to 3 weeks after initial spray of 3 to 5 ppm. **DO NOT** make a repeat application following a spray of greater than 5 ppm. Avoid late-season application. Insufficient height reduction may result following application of SUMAGIC Plant Growth Regulator to “Nellie White” Easter lilies grown under zero or negative DIF (day temperatures the same as or lower than night temperatures).

NOTE: Treatment with SUMAGIC Plant Growth Regulator may reduce the water requirement for Easter Lilies.

GERANIUM AND BEDDING PLANT SPECIES

Apply as a foliar spray.

Geranium and Bedding Plant Species for which use of SUMAGIC Plant Growth Regulator is Acceptable, with Stated Restrictions.

HOST SPECIES	ACCEPTABLE RATE (PPM UNICONAZOLE-P)*	ACCEPTABLE MAXIMUM NUMBER OF APPLICATIONS**	ACCEPTABLE APPLICATION TIMING***
BEDDING PLANTS			
Celosia (<i>Celosia plumosa</i>)	2.5 to 10	Two	5 to 10 cm height
Coleus (<i>Coleus</i> sp.)	5 to 10	One	2 to 5 cm height
Impatiens (<i>Impatiens walleriana</i> or <i>I. balsamina</i>)	2.5 to 10	Two	3 to 10 cm height
Marigold (<i>Calendula officinalis</i> , <i>Tagetes erectus</i> , <i>T. patula</i> , and <i>T. signata</i>)	5 to 15	Two	5 to 10 cm height
Pansy (<i>Viola wittrockiana</i>)	1 to 6	One; if > 3 ppm was applied Two; both applications of 1 to 3 ppm	3 to 5 cm height
Periwinkle (<i>Vinca minor</i>)	1 to 3	Two	5 to 10 cm height
Petunia (<i>Petunia hybrida</i>)	10 to 30	One	2 to 5 cm height
Salvia (<i>Salvia splendens</i> , <i>S. horminum</i> , <i>S. farinacea</i> , <i>S. coccinea</i> , and <i>S. sclarea</i>)	1 to 10	Two	3 to 10 cm height
Snapdragon (<i>Antirrhinum majus</i>)	10 to 30	One; if >15 ppm was applied Two; both applications of 10 to 15 ppm	5 to 10 cm height
Viola (<i>V. tricolor</i> , <i>V. cornuta</i> , and <i>V. williamsii</i>)	1 to 5	One	2 to 5 cm height
Geranium (Zonal: <i>Pelargonium hortorum</i> , and Ivy: <i>Pelargonium peltatum</i>)	2 to 4 if grown from seed; 2 to 8 if vegetatively propagated	Two	Use 2 to 4 ppm on seed geraniums when plant height is 5 to 16 cm. For vegetatively propagated geranium, apply 2 to 8 ppm to cuttings once rooting is established.

* SUMAGIC Plant Growth Regulator is extremely active at very low rates. Growers should be careful to initially use lower rates for younger seedlings. Application may be made by foliar spray only.

** To some crops (as indicated), a second application may be made as required, but no earlier than 7 days after the first application.

*** The application timing proposed was 5 to 16 cm height for all proposed bedding plant species. The application timing shown in this column was supported by the submitted data, however, the applicant and registrant may further restrict the application timing, but only within the accepted application window.

NOTE TO BUYER/USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the uses described in this section of the label were developed by persons other than Valent U.S.A. Corporation and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Valent U.S.A. Corporation itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used in accordance with this label.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Valent U.S.A Corporation, Valent Canada, Inc., and Valent Professional Products harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described on this label.

GREENHOUSE TOMATO SEEDLINGS FOR TRANSPLANT ONLY

Tomato transplants are typically grown at high densities, which limit penetration of light into the canopy. Therefore, transplants often have elongated, weak stems that are easily damaged. This can result in significant damage to transplants during shipment. Application of SUMAGIC Plant Growth Regulator results in compact transplants with thicker stems that are less likely to be damaged during shipment.

- Uniformly apply a single foliar application of a solution of 5 mL SUMAGIC Plant Growth Regulator per litre of water at the rate of 700 mL solution/m² per crop cycle at the 2-leaf stage of tomato seedlings, equivalent to 19 g a.i./ha.
- Mature tomatoes are to be harvested at a PHI of 100 days.

This use is restricted to greenhouse tomato seedlings that will be transplanted into the field.

STORAGE AND DISPOSAL

STORAGE

Keep pesticide in original container. Do not put concentrate or dilute solutions into food or drink container. Store in cool, dry, and well ventilated place away from seed, feed, fertilizer or other pesticides. Store the container tightly closed. To prevent contamination, store this product away from food or feed. Do not store diluted spray.

DISPOSAL

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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{Base Container Label}

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