

AUG 21 1991

Ms. Jackie DiMaggio
Valent U.S.A. Corp.
P.O. Box 8025
1333 North California Blvd.
Walnut Creek, CA 94596

Dear Ms. DiMaggio:

Subject: SUMAGIC Plant Growth Regulator
EPA Reg. No. 59639-37
Your submission dated July 24, 1991

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable. A stamped copy is enclosed for your records.

Sincerely yours,

Robert J. Taylor
Product Manager 25
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

to 6 weeks after final pinch. Azalea cultivars may vary in their response to SUMAGIC. Treat a small number of plants to confirm appropriate rates for local conditions and specific cultivars.

Shorter Growing Cultivars (Gloria, Saltwater): Apply SUMAGIC as a foliar spray at 2.56 oz./gal. (76 ml/gal., 10 ppm). If a second application is necessary, apply 1.28 to 2.56 oz./gal. (38 to 76 ml/gal., 5 to 10 ppm) approximately 2 to 3 weeks after the initial application.

Taller Growing Cultivars (Prize): Apply SUMAGIC as a foliar spray at 2.56 to 3.84 oz./gal. (76 to 114 ml/gal., 10 to 15 ppm). If a second application is necessary, apply 2.56 oz./gal. (76 ml/gal., 10 ppm) approximately 2 to 3 weeks after the initial application.

IXORA

For use in Florida only:

Apply SUMAGIC as a foliar spray at 5.12 oz./gal. (151 ml/gal., 20 ppm) 4 to 6 weeks after the final pinch as a uniform spray at a volume of 1.5 qts. per 100 sq. ft. of bench area. If a second application is necessary, apply 2.56 to 3.84 oz./gal. (76 to 114 ml/gal., 10 to 15 ppm) approximately 3 to 4 weeks after the initial application.

NOTE: Timing of applications will depend on cultivar, time of year, and growing conditions. Treat a small number of plants to confirm appropriate rates for local conditions and cultivars.

IMPORTANT NOTES

IMPORTANT: SUMAGIC is an extremely active plant growth regulator. Extreme caution must be exercised in measuring, diluting, and applying SUMAGIC. 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. Do not apply SUMAGIC to any food crops. Do not reuse soil from plants treated with SUMAGIC.

6

It is recommended that SUMAGIC be applied during morning or late afternoon hours, or when plants are not under environmental stress.

SUMAGIC retards elongation almost immediately after application. Assessment of rate response for most species can be made within five to seven days after treatment. If desired results are not evident, reapplication or an increased rate may be warranted.

Differences in plant response to SUMAGIC due to plant surface area in relation to soil surface area are possible. Extreme temperatures can influence plant response to SUMAGIC.

Shake before using.

RATE CONVERSION TABLE

Conversion between ppm, ml/l, ml/gal., oz./gal.

PPM	ML/L	ML/GAL.	FL OZ./GAL.
1	2	8	0.26
3	6	24	0.77
5	10	38	1.28
10	20	76	2.56
15	30	114	3.84
20	40	151	5.12
25	50	189	6.40
30	60	227	7.68
35	70	265	9.00
40	80	303	10.25
45	90	341	11.50
50	100	379	12.72
75	150	568	19.21

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

7

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Protect from temperatures below 32°F. This product may freeze. If freezing should occur, thaw and shake gently to unify the product. Do not store diluted spray. For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-457-2022.

PESTICIDE DISPOSAL: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Do not reuse container. Offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.

LIMITED WARRANTY: 1. Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorize any agent or representative to make, any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, **NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.** 2. Critical and unforeseeable factors beyond Valent's control prevent it from eliminating all risks in connection with the use of this product. Such risks include, but are not limited to, damage to plants and crops to which product is applied, lack of complete control over the handling and application of this product, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit under average conditions for the uses stated on the labeling and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Valent under 1 above) resulting from handling, storage, and use of the product. 3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

8

ACCEPTED
AUG 21 1991

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 59639-37

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS

CAUTION: Causes eye irritation. Avoid contact with eyes, skin and clothing. Wear protective clothing, long sleeved shirt, and rubber gloves. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

STATEMENT OF PRACTICAL TREATMENT: If in eyes, flush eyes immediately with fresh water for 15 minutes. If irritation continues, see a doctor. If on skin, wash with plenty of soap and water. See a doctor if irritation persists.

Note to Physicians: Emergency information—call 1-800-457-2022.

ENVIRONMENTAL HAZARDS: Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

DIRECTIONS FOR USE: It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL AND PAMPHLET, USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

REENTRY STATEMENT

Do not reenter treated areas until sprays have dried. SUMAGIC® is an effective growth retardant on a wide variety of floriculture crops. Dilute with water according to the directions below. Make foliar applications with standard spray equipment. Effective dose is strongly dependent on the application volume. Except where noted, rates expressed are based on a spray volume of 2 qts. applied uniformly to 100 sq. ft. of bench area and indicate the amount of SUMAGIC per gallon final spray solution.

Plant response to SUMAGIC is strongly influenced by cultural and environmental variables, such as growing media, water/fertilizer management, temperature, light, growing house composition, and other cultural practices. First time users of SUMAGIC should treat a limited number of plants at the lowest recommended rate. Rate adjustments may then be made according to plant response. Sequential applications of low rates may be made as necessary.

2

DIRECTIONS

Do not apply this product through any type of irrigation system.

FOR COMMERCIAL GREENHOUSE USE AND FOR LATHHOUSE AND SHADEHOUSE USE (WHERE PLANTS ARE GROWN IN CONTAINERS) ONLY.

This product has a potential to leach into groundwater or to runoff into surface water. In Greenhouses, Lathhouses or Shadehouses with soil flooring of high porosity and low organic content, do not apply directly to soil or to plants/pots in direct contact with soil.

POINSETTIA

FOLIAR SPRAY: Growth Retardation: Apply SUMAGIC as a foliar spray when the breaks are 1.5 to 2.0 inches (about 10 to 14 days after pinching). Use rates listed below and apply uniformly at a spray volume of 2 qts. per 100 sq. ft. of bench area. Multiple applications of the lower rate may be applied as necessary. First time users of SUMAGIC should make single or sequential applications at the lowest recommended rate to determine optimum dose for specific cultivars under local conditions. Late season application (after short-day initiation) may have negative effects on bract size, plant quality, and marketability.

DO NOT APPLY SUMAGIC TO POINSETTIAS AFTER THE INITIATION OF SHORT DAYS.

FLORIDA ONLY: DO NOT APPLY SUMAGIC TO POINSETTIAS AFTER OCTOBER 25.

Growing Region	Recommended Spray Concentration	Rate Range
All States except Florida	0.64 to 2.56 oz./gal. (Repeat as necessary) (19* to 76 ml/gal., 2.5 to 10 ppm)	
Florida	2.56 to 3.84 oz./gal. (Repeat as necessary) (76 to 114 ml/gal., 10 to 15 ppm)	

3

BEDDING PLANTS

FOLIAR SPRAY

Growth Retardation: Apply SUMAGIC as a foliar spray as plant elongation begins (plant height approximately 2 to 4 inches). Timing may vary with species and the user should determine the appropriate growth stage for specific cultivars and environmental conditions. Use rates listed below and apply uniformly at a spray volume of 2 qts. per 100 sq. ft. of bench area. Multiple applications of lower rate may be applied as necessary. Cultivars within the same species may respond differently to a given rate of SUMAGIC. First time users of SUMAGIC should make single or sequential applications at the lowest recommended rate to determine optimum dose for specific cultivars under local conditions.

Plant	Recommended Spray Concentration Rate Range		
	(oz./gal.)	(ml/gal.)	(ppm)
Ageratum	5.12 to 7.68	151 to 227	20 to 30
Celostia	2.56 to 5.12	76 to 151	10 to 20
Coleus	2.56 to 5.12	76 to 151	10 to 20
Dahlia	2.56 to 5.12	76 to 151	10 to 20
Impatiens*	1.28 to 2.56	38 to 76	5 to 10
Marigold**	2.56 to 5.12	76 to 151	10 to 20
Pansy	0.26 to 1.52	8 to 48	1 to 6
Periwinkle	0.77 to 1.28	23 to 38	3 to 5
Petunia	6.4 to 12.79	189 to 379	25 to 50
Salvia	2.56 to 3.84	76 to 114	10 to 15
Snapdragon***	6.49 to 12.79	189 to 379	25 to 50
Viola	0.26 to 1.28	8 to 38	1 to 5

*Seed Propagated

**Multiple application may be necessary

***Multiple applications necessary

NOTE: Begonias are exceptionally sensitive to SUMAGIC. Extreme care should be exercised to avoid spray drift onto Begonia cultivars.

4

EASTER LILIES

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

FOLIAR SPRAY

All states except Florida: Treat Easter Lilies with 2.56 to 7.68 oz./gal. (76 to 227 ml/gal., 10 to 30 ppm) SUMAGIC when shoots average 3 inches tall. Use a uniform spray volume 2 qt. per 100 sq. ft. of bench area. If a second application is made, it should be applied when shoots average 6 inches tall.

Florida only 2.56 to 3.84 oz./gal. (76 to 114 ml/gal., 10 to 15 ppm)

SOIL DRENCH

All states except Florida: Apply SUMAGIC when shoots average 3 inches tall. Use a solution concentration of between 0.06 oz./gal. and 0.13 oz./gal. (1.9 ml/gal. to 3.8 ml/gal. Apply 4 fl. oz. of diluted solution to each pot. Avoid late season applications.

Florida only 0.11-0.22 oz./gal. (3.22-6.43 ml/gal.)

CHRYSANTHEMUMS

FOLIAR SPRAY

Apply SUMAGIC as a foliar spray when the length of the breaks is 1.5 to 2.0 inches (about 7 to 14 days after pinching). Use from 1.28 to 2.56 oz./gal. (38 to 76 ml/gal., 5 to 10 ppm) in a uniform spray volume of 2 qts. per 100 sq. ft. of bench area. Multiple applications should be applied as necessary.

NOTE: Chrysanthemum cultivars vary widely in their response to SUMAGIC. Treat a small number of plants to confirm appropriate rates for local conditions and specific cultivars.

AZALEAS

For use in Florida only:

General Directions: Apply as a uniform spray at a volume of 1.5 qts. per 100 sq. ft. of bench area at approximately 4

5

3/5