

MAR 9 1993

William F. Cummings
Uniroyal Chemical Company
74 Amity Road
Bethany, Connecticut 06524-3402

Dear Mr. Cummings:

Subject: Amendments - Use Deletions
B-Nine
EPA Reg No 400-69 ✓
B-Nine SP
EPA Reg No 400-110
Your Submissions Dated June 26, 1992
FR Publication November 4, 1992

The amendments referred to above submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable subject to the comments listed below.

- (1) Add the statement "For Greenhouse Use Only".
- (2) Change Active "Ingredients" to "Ingredient".
- (3) Under Environmental Hazards, delete the first sentence.

Stamped copies of the revised labels are enclosed for your records. Please submit three copies of the finished labeling prior to releasing the products for shipment.

Sincerely,

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Cynthia L. Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosures

CONCURRENCES							
SYMBOL	H7505C						
SURNAME	D. W. [unclear]						
DATE	3-3-93						

PM22 400-69

2014

A SCOOP IS ATTACHED
FOR MEASURING CONVENIENCE

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 9 1993

B-NINE®

CONTROLS HEIGHT,
PROMOTES FLOWERING OF PLANTS

Under the Federal Insecticide
Fungicide, and Rodenticide Act
as amended, for the pesticide
registrations under EPA Reg. No.

400-69



COMPOSITION

Active Ingredients: (% by weight)	
Daminozide[butanedioic acid mono (2,2-dimethylhydrazide)]	85.0%
Inert Ingredients	15.0%
Total:	100.0%
UNIROYAL CHEMICAL COMPANY, INC., Middlebury, CT 06749	
EPA REG. NO. 400-69	
EPA EST. NO.	
B-NINE is a Registered Trademark of Unroyal Chemical Company, Inc.	002
©Copyright 1983. Unroyal Chemical Company, Inc.	
NET WEIGHT	

KEEP OUT OF REACH OF CHILDREN
CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink promptly a large quantity of milk, egg white or gelatin solution; if not available drink large amounts of water. Avoid alcohol. Call a physician immediately.

IF ON EYES OR SKIN: Wash with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before use.

IF INHALED: and abnormal symptoms develop see a physician.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
CAUTION

Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Do not allow spray solution to touch skin. Wear protective clothing to protect hands, arms and legs, both when diluting and applying this product. Avoid breathing dusts. Wear a protective mask during mixing/loading operations. Wash hands and face thoroughly with soap and water after use or before eating or smoking.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or wetlands. Do not discharge into lakes, streams, ponds or public waters unless in accordance with NPDES permit. For guidance, contact your Regional Office of the EPA. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Do not apply this product through any type of irrigation system.

APPLICATION NOTES

1. Do not add additional wetting agent or mix with insecticides or fungicides as burning of leaves may result.
2. Best results are obtained if plants are watered before spraying. Foliage should be dry when spray is applied. Wetted plants do not readily absorb B-NINE and poor results might be obtained if wetted plants are sprayed. Do not irrigate for 18 to 24 hours after spraying to allow the chemical to enter the plant.
3. Do not handle treated plants until sprays have dried.
4. To measure B-NINE, use the large end of the scoop provided.

REENTRY STATEMENT

Do not reenter treated areas until 24 hours after application, unless wearing protective clothing.

BEST AVAILABLE COPY

B-NINE® DILUTION TABLE

% B-NINE DESIRED	LEVEL SCOOPS* PER GALLONS** OF SOLUTION		WEIGHT MEASURE FOR ONE (1) GALLON OF SOLUTION	
	Scoops	Gallons	Ounces (avoirdupois)	Grams
0.15	1	3/4	0.24	6.7
0.25	2	1	0.40	11.1
0.37	3	1	0.60	16.7
0.50	4	1	0.80	22.3
0.75	6	1	1.20	33.4
1.00	8	1	1.60	44.5

*ONE LARGE LEVEL SCOOP = TWO LEVEL TEASPOONS

**Approximate dosage only. Use weight measurements wherever possible.

NOTE: Stock solutions prepared from B-NINE should not be held for more than 24 hours.

Place the amount of B-NINE shown into an empty one-gallon container. Then add enough warm water with stirring to make one gallon of solution. As B-NINE is soluble in water, no additional mixing is required.

GENERAL INFORMATION

B-NINE is dissolved in warm water then sprayed on the plant foliage using standard spray equipment. B-NINE passes into the leaf, then moves within the plant to reduce stem elongation. Treated plants develop a shorter, more compact habit of growth when compared to untreated plants. (See dilution table for converting percent concentration to dosage of B-NINE per gallon.)

Pot Chrysanthemums

To produce compact, branched (pinched) potted plants, spray to runoff 2 weeks after pinching with a 0.25% solution of B-NINE. If additional retardation is desired, a second application of 0.25% B-NINE may be applied 3 weeks after the first application. It is suggested that a "MEDIUM" schedule calling for shading and pinching on the same day be used for "TALL" varieties. This will eliminate the open, relatively leafless appearance often associated with the use of delayed pinch schedules.

Cut Chrysanthemums

To retard neck stretching just below the flower on potted and cut flowers, spray the top 1/3 of the foliage to runoff with 0.25% B-NINE two days after disbudding.

Chrysanthemum Cuttings

At certain times of the year or with certain tall or long internoded varieties, the conventional spray applications described above may not be adequate. Additional applications of B-NINE may be useful as pre-plant dips and post-plant sprays as follows:

PRE-PLANT DIP - Use 0.10% (1,000 ppm)

Rooted cutting: Hold a handful of cuttings by the root system; dip in the B-NINE solution just long enough to thoroughly wet all leaves and stems, remove and pot. Allow the foliage to dry before watering-in. Normally, by the time you are at the end of a bed, you can start watering-in those plants first potted.

Unrooted cutting: Remove unrooted cuttings from the box. Dip them in the B-NINE solution, remove and place in a flat. Cover with cheesecloth to avoid dehydration and place in the cooler overnight. Stick the next day and go on to a normal misting program.

POST PLANT SPRAY - Spray rooted cuttings as soon as the cuttings establish themselves (approximately 3-5 days after potting). Concentration will vary from 0.125% (1,250 ppm) to 0.25% (2,500 ppm), depending on variety and time of year.

Azaleas - Greenhouse Plants

To promote development of additional buds on plants grown for forcing,

spray when new growth following final shaping is 1-2 inches with either:
1. Two applications of 0.15% B-NINE at one-week intervals.
2. One application of 0.25% solution of B-NINE.

Hydrangeas - Summer Growth

For those greenhouse varieties that produce excessive growth during the summer following pinching, spray to runoff with a 0.75% solution of B-NINE when the regrowth is 1-2 inches in length, usually in late July, but not after the first week in August.

Hydrangeas - Spring Growth

To retard spring forcing growth, spray with a 0.5% solution of B-NINE when the new growth has just started to unfold and four to five pairs of leaves are visible. Apply 2-4 weeks after the start of forcing but not later than this time.

Bedding Plants

Excessive stem elongation of most bedding plants is prevented by a B-NINE spray made 2-3 weeks after transplanting, or when the plants begin to elongate (stretch). Use of a 0.5% concentration sprayed to the drip point is particularly effective on the following species: Ageratum, Asters, Begonia, Cosmos, Dahlia, Dusty Miller, Marigolds, Petunias, Phlox, Salvia, Verbena and Zinnias. In the sunbelt, B-NINE sprayed at 0.25% is effective for controlling elongation of Celosia, Crossandra, Eucalyptus, and Vinca. Two or more applications may be necessary on any of the above species if new growth begins to stretch. TO REDUCE LEAF INJURY OF PETUNIAS CAUSED BY AIR POLLUTANT, OZONE AND SULFUR DIOXIDE make a second application of 0.5% B-NINE one week after the first. B-NINE will not protect against leaf damage caused by the air pollutant PAN. Growth retardation will be more pronounced and there will be a delay in flowering from the second B-NINE application. Plants sprayed for pollution protection will be no shorter than those sprayed for compact growth.

Foliage Plants

In the sunbelt, B-NINE sprayed at 0.25% concentration to the drip point is effective for controlling elongation (stretching) and promoting improved appearance and coloration of certain foliage species such as Rademacheria (China Doll). Two or more applications may be necessary if new growth begins to stretch or for enhanced coloration.

Poinsettias

B-NINE reduces the elongation (stretching of poinsettias). For optimum growth control, a B-NINE spray should be applied to shoot breaks that are 1 1/2" to 2" long. The dosage range is 0.2 - 0.3% (2,000 - 3,000 ppm). Use the 0.2% dilution in areas north of the sunbelt and 0.3% in the sunbelt. A repeat application may be necessary for optimum plant size.

B-NINE Plus CYCOCEL® Sunbelt Region: A tank mix combination of B-NINE plus CYCOCEL has been shown to provide optimum retardation without marginal chlorosis. The tank mixture recommended is B-NINE at 0.2%-0.25% plus CYCOCEL at 0.15%. Spray this dilution on shoot breaks that are 1 1/2" to 2" long. Under prevailing high temperature conditions, that often exist in the sunbelt, the 0.25% dilution should be used with 0.15% CYCOCEL. A repeat application may be desirable if excessive elongation occurs. A slight reduction of bract size may occur on Hegg cultivars. No reduction has been observed on V-14 Glory or V-10 Army cultivars.

Northern Belt Region: The tank mixture recommended is B-NINE at 0.25% (2,500 ppm) plus CYCOCEL at 0.15% (1,500 ppm). One gallon of tank mix should be applied to 200 square feet of area. Application should be made when axillary shoots (shoot breaks) are 1 1/2" to 2" long. Only one application should be made due to the extreme effectiveness of the tank mix. The tank mix should not be applied after September 30.

Gardenias

To produce compact plants for spring bloom, spray with 0.5% B-NINE when plants are about 2/3 of final marketing size. This is from mid-August to mid-September for the Florida area and during the first two weeks of December for other areas.

STORAGE AND DISPOSAL

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

STORAGE: Store in a dry location.

Use spray and stock solutions within 24 hours. Do not store solutions. Immediate use is appropriate, if another component is added to spray mixture.

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

CONTAINER DISPOSAL

Plastic: Triple rinse (or equivalent). Then 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.

Paper: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT NOTICE—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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