



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D C 20460

PM 22 400-69

1084

OFFICE OF
PREVENTION PESTICIDES
AND TOXIC SUBSTANCES

JUN 11 1996

Allen R. Blem
Uniroyal Chemical Co., Inc.
74 Amity Road
Bethany, CT 06524-3402

Subject: B-Nine
EPA Reg. Number 400-69
B-Nine SP
EPA Reg. Number 400-110
Your label amendments dated May 16 26, 1996

Dear Dr. Blem,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable provided that you:

1. In the PERSONAL PROTECTIVE EQUIPMENT section, change "Mixers and Loaders Must Wear:....chemical-resistant apron when mixing or loading;..." to "Mixers and Loaders Must Wear:....chemical-resistant apron;..." (to delete "when mixing or loading", since this section applies only to mixers and loaders).
- 2 Submit one copy of your final printed labeling before you release the product for shipment.

If these conditions are not complied with, the registration may be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions about this letter, please contact Tobl Colvin-Snyder at 703-305-7801.

Sincerely,

Cynthia Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (7505C)

B-Nine®

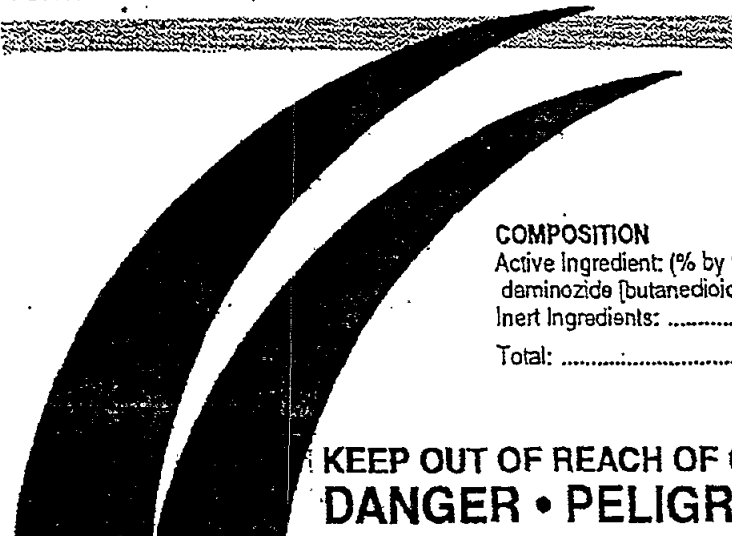
CONTROLS HEIGHT, PROMOTES FLOWERING OF PLANTS

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ACCEPTED
with COMMENTS
In EPA Letter Dated
JUN 11 1996

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

400-69



COMPOSITION

Active Ingredient: (% by weight)	
daminozide [butanedioic acid mono (2,2-dimethylhydrazide)]	85.0%
Inert Ingredients:	15.0%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN
DANGER • PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Net Contents:

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

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.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CORROSIVE. Causes irreversible eye damage. Do not get in eyes or on clothing. Harmful if absorbed through skin. Do not get on skin.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and Other Handlers (other than Mixers and Loaders) Must Wear: coveralls over short-sleeved shirt and short pants; waterproof gloves; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure; chemical-resistant apron when cleaning equipment.
Mixers and Loaders Must Wear: coveralls over short-sleeved shirt and short pants; waterproof gloves; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear; chemical-resistant apron when mixing or loading; dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Discard clothing and other absorbent materials that have been heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.



Uniroyal Chemical
Company, Inc.
Middlebury, CT 06749
EPA REG. NO. 400-69
EPA EST. NO.
010WPS

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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.

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 agency responsible for pesticide regulation.

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 24 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:

coveralls over short-sleeved shirt and short pants; waterproof gloves; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear.

APPLICATION NOTES

- FOR USE ONLY IN COMMERCIAL OR RESEARCH GREENHOUSES OR SHADEHOUSES.
- Do not add additional wetting agent or mix with insecticides or fungicides as burning of leaves may result.
- Best results are obtained if plants are watered before spraying. Foliage should be dry when spray is applied. Wilted plants do not readily absorb B-NINE and poor results might be obtained if wilted plants are sprayed. Do not syringe for 18 to 24 hours after spraying to allow the chemical to enter the plant.
- TO MEASURE B-NINE; USE THE LARGE END OF THE SCOOP PROVIDED:

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:

- Two applications of 0.15% B-NINE at one-week intervals.
- 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 regrowths are 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, Exacum, 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.

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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 *Radermachera* (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 1½" 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 1½" 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 Amy 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 1½ to 2 inches 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: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

Plastic: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by 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 bag in a sanitary landfill, 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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