

US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 018101

~~Due~~ date: MAY 10 1985

To: G. Werdia
Product Manager
Registration Division TS-767

From: Samuel M. Creeger, Chief
Environmental Chemistry Review Section 1
Exposure Assessment Branch
Hazard Evaluation Division TS-769c

Attached, please find the EAB review of:

Reg./File No.: _____

Chemical: Cycoce

Type Product: Plant growth regulator

Product Name: CYCOCEL

Company Name: American Cyanamid

Submission Purpose: Waiver request

Date In: 4/23/85

Action Code: 400

Date Completed: MAY 10 1985

ERB No.: 5543

TAIS (Level II) Days

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

G. Werdy:

From the scientific point of view,
the registrant's argument does not adequately
eliminate the possibility for leaching of CYCOCEL
to ground water. In any case, data for a
forestry use pattern would not be needed.

Samuel M. Berger

MAY 10 1985



American Cyanamid Company
Agricultural Research Division
P. O. Box 400
Princeton, NJ 08540
(609) 799-0400

December 11, 1984

Director
Special Pesticide Review Division (TS-791)
Office of Pesticide Programs
U.S. Environmental Protection Agency
401 M Street, S.W.
Waterside Mall, East Tower
Washington, D.C. 20460

Attention: Mrs. G. Werdig

Re: CYCOCEL[®] plant growth regulant
EPA Reg. No. 241-74
Ground Water Data Call-In Notice
Dated September 28, 1984

Dear Mrs. Werdig:

In response to the Ground Water Data Call-In Notice for CYCOCEL, we are requesting a waiver of the data required for the following reasons:

1. **Low Volume Use:** The total volume of CYCOCEL sold in the U.S. is between 9,000 to 10,000 pounds of active ingredient.
2. CYCOCEL is used as a plant growth regulant in the production of azaleas and red poinsettias (see labels attached).
3. The formulated product is only 11.8% or 1 pound a.i. per gallon, and the usage rate of one quart (0.25 pounds a.i.) will treat up to 640 red poinsettia pots.
4. The majority of the treatments for azaleas and red poinsettias are in the greenhouse and application is done by professional growers; therefore, the ground water request for terrestrial and forestry use are not appropriate.

Based on the preceding facts, we do not believe that the ground water requirements apply to CYCOCEL.

Your review and acceptance of this waiver will be appreciated.

Very truly yours,

Robert L. Linkfield, Ph.D.
Registrations Coordinator
Plant Industry Registrations

Front Panel

Leaflet

(Illustration)

CYCOCEL[®]
PLANT GROWTH REGULANT

EPA Reg. No. 241-74 -AA

FOR USE ON AZALEAS

REFER TO CONTAINER LABEL FOR USE ON RED POINSETTIAS



Sold By

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
PRINCETON, N.J. 08540

D46

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ADDITIONAL TEXT END OF CONTAINER

American Cyanamid Company
Agricultural Research Division
P.O. Box 400
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December 11, 1984

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EPA Reg. No. 241-74
Ground Water Data Call-In Notice
Dated September 28, 1984

Dear Mrs. Werdig:

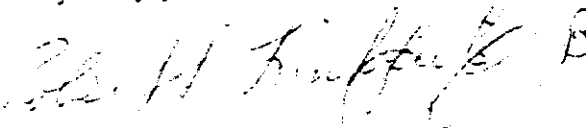
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Plant Industry Registrations

RLL:sd

® Registered trademark of American Cyanamid Company

Panel 1

PRECAUCION

AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you).

CAUTION!

HARMFUL IF SWALLOWED
MAY BE ABSORBED THROUGH SKIN
Avoid contact with skin and eyes
In case of contact, flush with plenty of water.
If irritation persists, get medical attention.
Wash thoroughly after handling.

DO NOT STORE BELOW FREEZING TEMPERATURES

DIRECTIONS FOR USE

Do not use this product for any uses other than those specified on this leaflet.

AZALEAS

OBTAIN EXPERIENCE IN SMALL-SCALE TRIALS BEFORE EXTENSIVE USE.

- I. TO PRODUCE EARLY BUDDING, COMPACT, SYMMETRICAL PLANTS - Apply as a uniform foliar spray at the rate of 2 to 3 ounces CYCOCEL per gallon of water in early July when regrowth following pinching or shearing is 3/4 to 1 inch long. Repeat application 1 week later. Use the higher rate in the South. In conjunction with optimum cultural practices, this treatment has induced development of multiple buds on many varieties forced for early blooming in the greenhouse. CYCOCEL has been used effectively on the following early blooming varieties: Alaska, Ambrosia, Ambrosius, Chimes, Coral Bells, Dorothy Gish, Easter Parade, Firelight, Gloria, Hexe, Hinodigiri, Red Wing, Mrs. L. C. Fischer, Salmon Queen, Snow, Snowbank, Sunset, Triumph.

Do not apply CYCOCEL on Dawn or other Pericat varieties as leaf injury may result. Over treatment with CYCOCEL may cause temporary leaf yellowing of some varieties forced for early blooming in the greenhouse. Experience indicates that such yellowing usually disappears during storage.

CYCOCEL treatment is not a substitute for any cultural practice (light, watering, fertilizer, temperature). Optimum cultural practices for greenhouse forcing of high quality plants vary with variety and geographical location. Consult your experiment station horticulturist for proper timing and duration of light intensity, day length, cool storage and greenhouse conditions for forcing early blooming azaleas. CYCOCEL may slightly delay flowering of some varieties exposed to cool storage.

II. TO CONTROL UNDESIRABLE VEGETATIVE GROWTH AND PREVENT LATE SEASON GROWTH IN NURSERY STOCK - When plants have reached desired head size following pinching or shearing, apply as a uniform foliar spray at the rate of 3 ounces CYCOCEL per gallon of water. Repeat application 1 week later.

Apply spray to well watered, vigorously growing plants. Foliage should be dry at time of treatment. Repeat application if rain occurs or foliage is washed within 24 hours after treatment.

The compatibility of CYCOCEL when mixed with insecticides, acaricides, fungicides and fertilizers is not known. Therefore, do not use CYCOCEL in combination with these materials.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

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American Cyanamid Company
Agricultural Division
Princeton, NJ 08540

L2826R2-4-78

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If irritation persists, get medical attention
Wash thoroughly after handling

DO NOT STORE BELOW
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AZALEAS

OBTAIN EXPERIENCE IN SMALL-SCALE
TRIALS BEFORE EXTENSIVE USE

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CYCOCEL[®]

PLANT GROWTH REGULANT FOR USE ON AZALEAS

EPA Reg. No. 241-74-AA



REFER TO CONTAINER LABEL
FOR USE ON RED POINSETTIAS

Sold by

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
PRINCETON, N.J. 08540

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D48

Do not apply CYCOCEL on Dawn or other Pericat varieties as leaf injury may result. Over treatment with CYCOCEL may cause temporary leaf yellowing of some varieties forced for early blooming in the greenhouse. Experience indicates that such yellowing usually disappears during storage.

CYCOCEL treatment is not a substitute for any cultural practice (light, watering, fertilizer, temperature). Optimum cultural practices for greenhouse forcing of high quality plants vary with variety and geographical location. Consult your experiential station horticulturist for proper timing and duration of light intensity, day length, cool storage and greenhouse conditions for forcing early blooming azaleas. CYCOCEL may slightly delay flowering of some varieties exposed to certain cool storage conditions.

- II. TO CONTROL UNDESIRABLE VEGETATIVE GROWTH AND PREVENT LATE SEASON GROWTH IN NURSERY STOCK — When plants have reached desired head size following pinching or shearing, apply as a uniform foliar spray at the rate of 3 ounces CYCOCEL per gallon of water. Repeat application 1 week later.

Apply spray to well watered, vigorously growing plants.

Foliage should be dry at time of treatment.

Repeat application if rain occurs or foliage is washed within 24 hours after treatment.

The compatibility of CYCOCEL when mixed with insecticides, acaricides, fungicides and fertilizers is not known. Therefore, do not use CYCOCEL in combination with these materials.

PRECAUTIONS

3. Apply 5% water on the surface, do not use this product until the label has been fully explained to you.

CAUTION!

DO NOT STORE BELOW FREEZING TEMPERATURES

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DIRECTIONS FOR USE

RED POINSETTIAS

RED POINSETTIAS

Flow Diameter (Inches)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)	Flow Rate (gpm)
2	2 1/2 to 3	4	5	6
3	3	4	5	6
4	4	5	6	8
5	5	6	8	10
6	6	8	10	12
8	8	10	12	15

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1-2250157-4/78



CYCOCEL

PLANT GROWTH REGULANT

For Use On

AZALEAS AND RED POINSETTIAS

REFER TO ATTACHED LEAFLET FOR USE ON AZALEAS

Active Ingredient:

(2-chloroethyl)dimethylammonium chloride 11.8%

Inert Ingredients 88.2%

1 gallon contains 1 pound (2-chloroethyl)dimethylammonium chloride

EPA Reg. No. 241-74-AA EPA Est. No. 8591D-PA-1



CAUTION!
KEEP OUT OF REACH OF CHILDREN
See Side Panel For Additional Cautions
PRECAUCIONI

Net Contents: 1 Quart Liquid 0.95 liters
2480104 D49

Plants should be well rooted and established in the container before treatment. CYCOCEL may be applied directly in pots or when removing cuttings. For all applications, refer to the following instructions. Response is measured when application is made. In pots, response is measured when application is made. In pots, response is measured when application is made.

1. In pots or flats, treat with CYCOCEL on the following dates: July and early September are preferred for the following stages of growth. Do not apply later than September 15 in the North and October 1 in the South.
2. After plants are in 2" to 3" stock, treat when active root development is observed. Do not apply later than October 1 in the North and November 1 in the South.
3. After plants are in 4" to 6" stock, treat when active root development is observed. Do not apply later than October 15 in the North and November 15 in the South.

Proper rates of application for use in pots and white poinsettias are to be determined. CYCOCEL after the dates recommended since over-dosing and credited back may result. Do not apply later than October 15 in the North and November 15 in the South.

Clean application equipment by rinsing thoroughly with water.

RISER/DRAIN AND DISPOSAL PROCEDURE: Please apply on outside of pots after use. Rinse thoroughly with water containing a household detergent. Rinse and discard water. Do not reuse.

The method of controlling plant growth, consisting of treating plants with the chemical herein, is covered by U.S. Patent Nos. 3,158,354 and 3,158,356 and the use of which, such chemical herein, is covered by U.S. Patent Nos. 3,158,354 and 3,158,356.

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In case of an emergency endangering life or property, or in case of a spill of this product, call collect, day or night, American Cyanamid Company, P.O. Box 281, Port Jervis, New York 13421.