

CYCOCEL[®]



Plant Growth Regulant

FOR USE ON ORNAMENTALS

Product Information Bulletin 301

GENERAL INFORMATION

CYCOCEL is a plant growth regulant for ornamentals.

CYCOCEL enhances the crop's aesthetic appeal and improves durability during post production shipping and handling. Treated crops are more compact with shorter internodes, stronger stems, and greener leaves.

CYCOCEL contains 11.8% chlormequat (2-chlorethyl) trimethylammonium chloride. (1.0 lbs per US gallon)

Common Name: Chlormequat

Chemical Class: Quaternary Ammonium

Packaging: Quarts, gallons and 30 gallon plastic drums

RESTRICTED ENTRY INTERVAL (REI) AND SIGNAL WORD

REI = 12 hours

Signal word = CAUTION

PERSONAL PROTECTION EQUIPMENT (PPE)

- Long-sleeved shirt and long pants
- Water-proof gloves
- Shoes with socks

ADVANTAGES OF CYCOCEL

- Forgiving PGR - easy to use by experienced and new growers on all labeled crops.
- Enhances crops aesthetic appeal and improves durability during shipping.
- Contains wetting agent.
- Synergistic with B-nine[®]
- Cost effective as foliar application.

MODE OF ACTION

CYCOCEL is a gibberellin inhibitor.

USE SITES

Poinsettias: **CYCOCEL** can be used to reduce stem elongation of all poinsettia varieties. It can be applied as needed to stock

plants, cuttings during propagation, and before or after pinching plants grown for flowering. Spray applications can be made between 800 and 1,500 ppm, and drench applications can be made between 3,000 and 4,000 ppm. Multiple applications may be made as needed at intervals between 3 and 14 days.

Geraniums: **CYCOCEL** is recommended for controlling plant size of seed and vegetatively propagated geraniums, as well as inducing early flowering of seed geraniums. Rates range from 800 to 1,500 ppm, and generally first applications are made after stems have started elongating.

Bedding Plants: **CYCOCEL** will effectively control the stem elongation of a wide variety of bedding plant crops grown in packs, pots, hanging baskets, and plug trays. Spray application rates range from 800 to 1,500 ppm, but may increase to 3,000 ppm after extensive trials.

Other Herbaceous Crops: **CYCOCEL** can be used to reduce stem elongation in other herbaceous crops such as flowering potted plants, tropical and temperate perennials, and foliage plants. The optimum **CYCOCEL** rate, timing of application and frequency will vary for different crops and amount of height control desired by individual users.

Hibiscus: **CYCOCEL** is recommended to improve flowering and to produce more uniform shoot growth in hibiscus. Spray application rates range from 200 to 600 ppm depending on variety and amount of control desired. First application should be made when laterals are 0.5 to 1.0 inch long and 3 to 4 applications after last pinch may be required.

Azaleas: **CYCOCEL** produces earlier budded plants with multiple buds per shoot. Treated azaleas also have more compact, symmetrical heads.

Spray applications rates range from 1,000 to 2,000 ppm, but may range to 4,000 ppm in some cases.

Other Woody Flowering Crops: Other woody flowering crops can be treated with **CYCOCEL** to produce more compact growth and earlier flower bud initiation. Users should evaluate **CYCOCEL** in small-scale trials to determine how best to apply it under their individual situations.

APPLICATION and RATES

PREPARATION OF **CYCOCEL** SOLUTIONS

For Spray and Drench Applications

Concentration (ppm)*	CYCOCEL (fl.oz. / gal)	CYCOCEL (mL / gal)	CYCOCEL (mL / l)
200	0.217	6.42	1.69
460	0.500	14.7	3.90
800	0.868	25.7	6.78
1,000	1.08	32.1	8.47
1,250	1.36	40.1	10.6
1,500	1.63	48.1	12.7
2,000	2.17	64.2	16.9
3,000	3.25	94.2	25.4
4,000	4.34	128.0	33.9

*ppm calculations based on total **CYCOCEL** product

Determining Optimal Cycocel Usage:

The optimum usage of **CYCOCEL** varies depending on the crop, the individual users production situation and the desired final plant height and appearance. Users should determine the optimum **CYCOCEL** rate, timing, and frequency under their individual production situations.

Users should obtain experience in small-scale trials under the different conditions where **CYCOCEL** is to be used. The **CYCOCEL** rates recommended are general guidelines to be used by growers in trials to

determine specific, optimum usage appropriate for their operation.

Cycocel/B-Nine™ Tank Mix: On crops that are not very sensitive to **CYCOCEL** or when an excessive number of applications are required, a tank mix of **CYCOCEL** and B-Nine can be applied. When used in conjunction these products are synergistic, producing greater results than either chemical used alone. Optimum rates of each product will vary depending on the crop, the users preference for height control, and the individual production situation.

CYCOCEL AND B-NINE TANK MIX SPRAY RATES

Activity	CYCOCEL (ppm)	B-Nine (ppm)
Very High	1,500	5,000
High	1,500	2,500
Medium	1,250	1,250
Low	1,000	800

B-Nine is a registered trademark of Crompton Corp.