

Approved booklet (chlormequat chloride re-evaluation [2010-1416]), January 26, 2011

CYCOCEL® EXTRA

LIQUID PLANT GROWTH REGULATOR

For treatment of winter wheat to produce shorter, thicker, stronger stems for improved lodging resistance and a plant growth regulator for greenhouse grown poinsettias and geraniums

COMMERCIAL (AGRICULTURAL)

GUARANTEE: Chlormequat Chloride 460 g/L

REGISTRATION NO. 17001

PEST CONTROL PRODUCTS ACT

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT
1-800-454-2673**



CAUTION

POISON

READ THE ENTIRE LABEL AND BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1 – 10 L

BASF Canada Inc.
100 Milverton Drive
5th Floor
Mississauga, Ontario
L5R 4H1
1-877-371-2273

CYCOCEL® Extra is a registered trademark of BASF.

DIRECTIONS FOR USE

DO NOT exceed 2 applications per crop cycle for greenhouse ornamentals.

DO NOT allow effluent or runoff from greenhouses containing this product to enter lakes, streams, ponds or other waters.

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

DO NOT apply by air.

Field sprayer application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Boom height must be 60 cm or less above the crop or ground.

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand-held or backpack sprayer and spot treatment.

Buffer zones

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands).

Method of Application	Crop	Buffer zones required for the protection of terrestrial habitat (metres)
Field sprayer	Winter wheat	1

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at www.croplife.ca.

Winter Wheat

CYCOCEL EXTRA is a plant growth regulator for use on certain varieties of winter wheat in intensive crop management systems. It can produce shorter, thicker and stronger stems and improve lodging resistance. Use only on the varieties listed until local recommendations are developed for use on other varieties.

The use of **CYCOCEL EXTRA** is usually part of an intensive management program aimed at high yields and improved quality involving application of increased levels of nitrogen. Additional leaf disease incidence may develop. This may require fungicide sprays for maximum yield. Follow local recommendations for fertilizer use and disease control practices.

Greenhouse Plants

CYCOCEL EXTRA is also a plant growth **retardant** that enhances the aesthetic appearance of geranium and poinsettia. Treated plants are more compact with shorter internodes, stronger stems and smaller darker green leaves.

CYCOCEL EXTRA should only be applied to established plants with healthy root stems. **CYCOCEL EXTRA** will normally reduce internode elongation for up to three weeks following drench application depending on crop culture, environmental conditions and plant growth habit. Multiple applications can be applied as needed but frequency should be adjusted based on the conditions described above.

CYCOCEL EXTRA when applied as a drench application is absorbed by the roots and transported systemically up into the actively growing shoot tips. The growing media should be uniformly saturated when **CYCOCEL EXTRA** is applied. Apply the drench to moist growing media and not when crops require irrigation.

The rate and frequency of application of **CYCOCEL EXTRA** will vary depending on following three factors; greenhouse environment, cultural conditions and cultivar growth differences. **CYCOCEL EXTRA** is not a substitute for good cultural practices (light, temperature, relative humidity, spacing, and fertilization). Optimal cultural practices for greenhouse production vary with season, day length and geographical location.

Winter Wheat

Timing of Application

Correct timing of application is important. Too early an application may lessen the effectiveness on stem shortening. Too late an application can reduce the effect on stem thickening of the lower internodes.

Apply **CYCOCEL EXTRA** as a spray during good growing conditions in the spring, and apply toward the end of tillering (Feekes large scale growth stage 4-6, as indicated on chart outlined below) but not later than when the first node or joint can be felt at the base of the majority of tillers. (Feekes large scale growth stage 7).

Rates of Application

The amount of **CYCOCEL EXTRA** applied varies with the winter wheat variety grown and the amount, form and timing of nitrogen fertilizer applied. Refer to the APPLICATION RATE TABLE for specific varietal recommendations.

Apply in 200-400 litres of water per hectare.

APPLICATION RATE TABLE

Wheat Variety		Product Rate L/ha	Feekes Large* Scale Growth Stage (Refer to Growth Chart)	Comments
Lennox	Single	2.5 – 3.0	6	Apply when risk of lodging is high or where an intensive management system is used.
	Split	2.5	4	
		+	+	
		0.75	6	
Monopol	Single	2.0 – 2.5	6	Apply when risk of lodging is high or when a high nitrogen fertilizer system is used.
	Split	2.0 – 2.5	4	
		+	+	
		0.5	6	
	OR Late	2.5 – 3.0	6	
Vuka	Single	2.5	6	Apply when risk of lodging is high or where a high nitrogen fertilizer system is used.
	Split	2.0	4	
		+	+	
		0.5	6	
Absolvent	Single	2.5	6	Apply when risk of lodging is high or when a high nitrogen fertilizer system is used.
	Split	2.0	4	
		+	+	
		0.5	6	
Norstar	Single	2.5	6	Apply when risk of lodging is high or when a high nitrogen fertilizer system is used.
	Split	2.5	4	
		+	+	
		0.75	6	

* Feekes growth stage 4 = Zadok stage 23 - 29.
 Feekes growth stage 6 = Zadok stage 31.

Greenhouse Plants

Geranium

CYCOCEL EXTRA is a plant growth retardant that provides height control by reducing stem elongation of all zonal-type geraniums, promotes branching and early flowering. Apply **CYCOCEL EXTRA** as a uniform media drench three weeks after transplanting when well rooted or when stems begin to rapidly elongate.

Apply at the rate of 1500 – 3000 ppm; 325 – 650 mL **CYCOCEL EXTRA**/100 L of water. See table below for volume to apply based on pot size or diameter.

Poinsettia

CYCOCEL EXTRA is a plant growth retardant that provides height control by reducing stem elongation of all poinsettias. Shoots or stems treated with **CYCOCEL EXTRA** are more compact, and stronger with deeper green foliage. Apply as a uniform media drench at the rate of 1500 – 3000 ppm; 325 – 650 mL **CYCOCEL EXTRA**/100 L of water. See table below for volume to apply based on pot size or diameter.

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

Timing of Application

Plants should be well rooted and established before treatment. Most effective response is obtained when application is made during early periods of active growth. Early application will produce more compact plants. Do not apply later than October 15th for poinsettias grown under natural photoperiod as crinkled bracts may result and bract size reduced. Avoid application when plants are pot bound.

Volume of Dilute Solution to Apply based on Pot Diameter

Pot Diameter (cm)	Dilute Solution (mL/pot)
11	90
13	120
15	180
20	240
25	300

MIXING

1. Add about half the required water to the spray tank.
2. Add the recommended quantity of **CYCOCEL EXTRA**, then the remainder of the water.
3. Agitate well before and during spraying.

ENVIRONMENTAL HAZARDS

Observe buffer zones specified under DIRECTIONS FOR USE.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between area and the edge of the water.

RESTRICTIONS AND LIMITATIONS

Do not apply when crop is under stress from prolonged cold weather, poor fertility or other factors.

Do not apply when crop is wet or if rain is expected within four hours.

DO NOT APPLY BY AIR.

Caution: Do not graze treated crops or cut for hay. There is not sufficient data to support this use.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Do not take internally.
3. Avoid inhalation of vapour, dust, or spray mist and contact with eyes, skin or clothing.
4. Wash thoroughly after handling and before eating, drinking or smoking.
5. Wear protective equipment and clothing, including goggles or face shield, approved respirator, gloves (rubber, PVC, neoprene or nitrile), hat, long-sleeved shirt, trousers and rubber boots.
6. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
7. Do not contaminate domestic or irrigation water, lakes, streams or ponds by the cleaning of equipment or the disposal of wastes.
8. Do not enter or allow worker entry into treated areas for 12 hours following application.
9. Do not apply where runoff or erosion is likely to occur.
10. Do not apply when environmental conditions may cause drift from treated areas.
11. Clean spray equipment thoroughly after use.

FIRST AID

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE

1. Store in original, tightly closed container.
2. Do not ship or store near food, feed, seed or fertilizers.
3. Store in cool, dry, locked, well-ventilated area without floor drain.
4. Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.
5. Protect from freezing.

DISPOSAL

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

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