

[[BOOKLET]]

GROUP	2	HERBICIDE
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NUFARM

CHAPERONE Herbicide

Water dispersible granules

FOR SALE FOR USE ON SOYBEANS IN EASTERN CANADA ONLY

COMMERCIAL

REGISTRATION NO. 30475 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BOOKLET BEFORE USING

GUARANTEE:

Chlorimuron-ethyl ... 25.0%

Warning, contains the allergen *sulfite*

Nufarm Agriculture Inc.,
5507 First St. S.E.,
Calgary, AB, T2H 1H9
1-800-868-5444

24-Hour Emergency Response Number
1-800-424-9300

PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN. Avoid breathing spray mist. Avoid contact with skin, eyes and clothing. Do not contaminate any body of water. Do not enter or allow others to enter treated areas during the restricted entry interval of 12 hours after application.

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.

IMPORTANT:

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

Do not apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water that may be used on other crops. Carefully observe sprayer clean-up instructions, as spray tank residue may damage crops other than soybeans.

DO NOT APPLY BY AIR.

APPLY Nufarm CHAPERONE Herbicide WITH A RECOMMENDED SURFACTANT.

Protective clothing and equipment:

Do not handle pesticides with bare hands. Chemical-resistant gloves significantly reduce hand exposure. Wear gloves for mixing/loading/cleanup operations and when making sprayer and nozzle repairs and adjustments. Do not use leather or cloth gloves. Wear coveralls, or long-sleeved shirt and long pants, for mixing, loading, and applying, and during clean-up and repair activities.

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.

In case of skin or clothing contact, 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 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.

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.

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

TOXICOLOGICAL INFORMATION: Treat symptomatically.

EMERGENCY TELEPHONE NUMBERS:

For spills or transportation accidents, Chemtrec, 1-800-424-9300.

For health or environmental emergencies, Prosar, 1-877-325-1840.
For product and use information, Nufarm Agriculture Inc., 1-800-868-5444.

GENERAL INFORMATION:

Nufarm CHAPERONE Herbicide is recommended for selective postemergence control of broadleaf weeds in soybeans. Nufarm CHAPERONE Herbicide is formulated as a dry flowable granule to be mixed in water and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile, and does not freeze. Keep product away from excess moisture or physical damage during storage and prior to mixing in the spray tank.

Nufarm CHAPERONE Herbicide must be applied with a recommended surfactant early postemergence to the main flush of actively growing weeds. Warm, moist growing conditions promote active weed growth and enhance the activity of Nufarm CHAPERONE Herbicide by allowing maximum foliar uptake and contact activity. Weeds hardened off by environmental stress may not be adequately controlled and regrowth may occur. Nufarm CHAPERONE Herbicide may only be applied using ground equipment. For best results, ensure thorough spray coverage of target weeds.

Nufarm CHAPERONE Herbicide rapidly stops growth of susceptible weeds. However, typical symptoms (discoloration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions and weed susceptibility. Favourable growing conditions following treatment promote the activity of Nufarm CHAPERONE Herbicide while cold, dry conditions delay the activity.

Degree of control and duration of effect depend on weed sensitivity, weed size, crop competition, growing conditions and spray coverage.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY:

Nufarm CHAPERONE Herbicide applications made during or immediately following a large and rapid fluctuation in temperature (20°C or greater difference between night time lows and daytime highs) which stresses the crop may increase the potential for crop injury.

Apply Nufarm CHAPERONE Herbicide when temperature is expected to be below 28 degrees C within 12 hours of application.

Apply when the minimum temperature in the 24 hours before and after application is above 5 degrees C. If soybeans have been injured by frost, wait at least 48 hours before applying the herbicide(s).

DIRECTIONS FOR USE:

RATES AND TIMING:

Timing: Optimum timing of Nufarm CHAPERONE Herbicide for annual broadleaf weed control is when soybeans are in the 1 to 3 trifoliolate stage of growth. Do not apply Nufarm CHAPERONE Herbicide before the first trifoliolate has fully expanded or after the initiation of flowering. Nufarm CHAPERONE Herbicide can be applied up to 60 days before harvest.

Rate : Use 36 grams of Nufarm CHAPERONE Herbicide per hectare.

A non-ionic surfactant such as AGRAL® 90, CITOWETT® PLUS, or AG-SURF® must also be used at 0.2% v/v.

For best results, apply to young actively growing weeds before the soybean canopy closes. Weeds that emerge after treatment may not be controlled.

NOTE: Do not apply to soybeans that have been stressed by severe weather conditions such as frost or hot, humid weather as crop injury may result.

If rain occurs after application, control may be reduced. Two - four hours of dry weather are needed to allow Nufarm CHAPERONE Herbicide to be absorbed by weed foliage.

WEEDS CONTROLLED BY Nufarm CHAPERONE Herbicide ALONE:

Weeds	Leaf Stage	Height (cm)
Common Ragweed	2-6	10 cm tall or across
Dandelion*	pre-bloom	15 cm tall or across
Redroot Pigweed	2-8	10 cm tall or across
Velvetleaf**	2-4	10 cm tall or across
Yellow Nutsedge	Up to 8	5-15 cm tall or across

*Top Growth Control (4 to 6 weeks)

** The addition of liquid fertilizer containing 28% nitrogen to the spray mixture at the rate of 2 litres per hectare may improve control of velvetleaf and should be added after the surfactant

Nufarm CHAPERONE Herbicide TANK MIXES:

a. Nufarm CHAPERONE Herbicide + glyphosate

Apply Nufarm CHAPERONE Herbicide at 36 grams per hectare, tank mixed with glyphosate (present as potassium salt, isopropylamine salt, or di-ammonium salt) and adjuvant (where required).

Tank mix partner	Application Rate	Application Timing	Crops	Weeds controlled	Application Stage
glyphosate (present as potassium salt, isopropylamine salt, or di-ammonium salt)	900 g ae/ha	Pre-plant burndown	Conventional & glyphosate tolerant soybeans	Dandelion (season long control)	Up to bolting
				Annual sowthistle	2-5 leaf
				Common lamb's quarters	Up to 6 leaf
				Prickly Lettuce	1-7 leaf
				Yellow nutsedge (suppression only)	Up to 3 leaf

glyphosate (present as potassium salt, isopropylamine salt, or di-ammonium salt) plus non ionic surfactant (Agral 90, Citowett Plus or Ag-Surf at 0.2% v/v)	900 g ae/ha	1-3 Trifoliolate	glyphosate tolerant soybeans	Annual sowthistle (season long control)	less than 15 cm tall and across
				Common lamb's quarters	Up to 6 leaf
				Dandelion (season long control)	less than 15 cm tall and across
				Prickly Lettuce	1-7 leaf
				Yellow nutsedge (season long control)	Up to 8 leaf

Consult the respective glyphosate herbicide labels for specific instructions for 'Directions for Use', Precautions, and for other weeds controlled by glyphosate herbicide.

If rain occurs after application, control may be reduced. 2 - 4 hours of dry weather are needed to allow Nufarm CHAPERONE Herbicide to be absorbed by weed foliage.

b. Nufarm CHAPERONE Herbicide + ASSURE® II Herbicide:

Tank mix partner	Application Rate	Weeds controlled	Notes
Nufarm CHAPERONE Herbicide	36 g/Ha	Annual Grasses, Common Ragweed, Redroot Pigweed and Velvetleaf	* Use the 0.5 L/ha rate of ASSURE® II Herbicide when quackgrass and yellow foxtail are present in the field. The tank mix of Nufarm CHAPERONE Herbicide and Assure II Herbicide may result in reduced control of these two grassy weeds.
plus			
ASSURE II Herbicide	0.38 - 0.5* L/Ha		
plus			
Sure-Mix®	0.5% v/v		

Consult the label of the tank mix partner product, and follow the most stringent set of precautions, restrictions and directions for use.

Consult the ASSURE II Herbicide label for specified rates and optimum leaf stage timing for grassy weeds. If leaf stages of the grass and broadleaf weeds do not coincide, a sequential application of the grass and broadleaf herbicides is required to ensure satisfactory control.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS:

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Nufarm Agriculture Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Nufarm Agriculture Inc., itself makes no representation or warranty with respect to product performance (efficacy) and crop tolerance (phytotoxicity) claims for this product when used on the crops listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Nufarm Agriculture Inc. harmless from any claims based on efficacy or phytotoxicity in connection with the uses described below.

SOYBEANS (Eastern Canada):

POSTEMERGENCE: Apply 36 g/ha Nufarm CHAPERONE Herbicide + 0.2% v/v of a non-ionic surfactant + 2 L/ha liquid nitrogen fertilizer at 28% UAN for the suppression of wild carrot (*Daucus carota*) and volunteer adzuki beans (*Vigna angularis* Ohwi & Ohashi). Make only one application per year. Apply to soybeans in the 1-3 trifoliolate stage of growth; apply to wild carrot when in the 2-20 leaf stage of growth and apply to volunteer adzuki beans when in the 1-3 trifoliolate stage of growth.

Apply in a spray volume of 140-190 L water/ha.

Do not apply within 60 days of harvest.

Refer to other sections of this label for additional application instructions, soil limitations and/or use precautions. The addition of liquid fertilizer containing 28% nitrogen to the spray mixture at the rate of 2 L/ha is required for the suppression of volunteer adzuki beans and wild carrots and it may also improve control of velvetleaf.

MIXING INSTRUCTIONS:

1. Fill clean tank about 1/4 full with fresh water.
 2. Turn on full agitation.
 3. Add the proper amount of Nufarm CHAPERONE Herbicide to the water in the spray tank with the agitator running. Maintain full agitation until product is fully dispersed. Continuous agitation is required to keep the product in suspension.
 4. After Nufarm CHAPERONE Herbicide has been well mixed and is in suspension, add the tank mix partner, if applicable.
 5. Add a recommended amount of spray adjuvant (if required).
 6. Fill the remainder of the spray tank with clean water.
- On repeat tank loads, ensure that the amount of spray solution left in the tank from the previous load is less than 10% of the volume about to be mixed.
 - Agitation is required for uniform mixing and application.
 - The optimum water volume for Nufarm CHAPERONE Herbicide application is 140-190 litres of water per hectare (minimum of 100 litres of water per hectare).
 - Flat fan nozzles are recommended. Use 50 mesh filter screens or larger.

- Use spray preparation of Nufarm CHAPERONE Herbicide within 24 hours or product degradation may occur resulting in a loss of weed control. Use vigorous agitation to thoroughly disperse spray mixtures that have been allowed to stand in the tank.

NOTE: Nufarm CHAPERONE Herbicide will degrade in acidic or highly alkaline water. Mix no more than can be used in one day. If spraying is interrupted, thoroughly re-agitate the spray mixture before resuming spraying.

Do not mix or load where there is potential to contaminate wells or aquatic systems.

SPRAYER CLEANUP:

To avoid subsequent injury to crops other than soybeans immediately after spraying and prior to spraying other crops, thoroughly remove all traces of Nufarm CHAPERONE Herbicide from mixing and spray equipment as follows:

1. Drain tank; then flush tank, boom and hoses with clean water for a minimum of ten minutes. Visually inspect tank to assure removal of all visible residues of Nufarm CHAPERONE Herbicide. If necessary, repeat step 1. **DO NOT CLEAN SPRAY EQUIPMENT NEAR WELLS, AQUATIC SYSTEMS, OR OTHER WATER SOURCES, OR NEAR DESIRABLE VEGETATION.**
2. Fill tank with clean water while adding 1 litre household ammonia (containing minimum 3% ammonia) per 100 litres of water. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation. Again flush the hoses, boom and nozzles with the cleaning solution and drain tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat Step 2.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.

REPLANTING TO OTHER CROPS:

Nufarm CHAPERONE Herbicide is degraded by natural soil processes, and field tests have shown that the following crops may safely be planted at the prescribed interval following soybeans that have been treated with Nufarm CHAPERONE Herbicide. The recropping intervals are dependent on the pH of the soil, as well as the sensitivity of the specific rotational crop.

Replanting Interval (Months)

Soil pH	Winter Wheat	Tomatoes	Field Corn, Soybeans	White Bean, Alfalfa	For Southern Ontario only: Cabbage, Garden pea, Sweet corn*
≤ 7.0	3	12	10	10	11
>7.0 ≤ 7.4	3	12	10	10	Do Not Plant
>7.4 ≤ 7.8	4	12	10	Do Not Plant	
>7.8 ≤ 8.0	4	12	Do Not Plant		

* Warning: Sweet corn varieties may vary in their sensitivity to chlorimuron-ethyl residues. Soil pH may vary significantly within a single field. It may be affected by soil amendments (i.e. lime, fertilizers, etc.) or soil conditions (i.e. eroded knolls, etc.).

For other crops, a field bioassay is recommended before planting. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production the following year.

FIELD BIOASSAY:

Select a representative area or areas of the field previously treated with Nufarm CHAPERONE Herbicide to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turn-around areas when selecting the site(s) that are most representative of the soil conditions in the field.

On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones.

Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with Nufarm CHAPERONE Herbicide to use as a comparison.

As the crop(s) emerges and grows, examine these key points in Nufarm CHAPERONE Herbicide treated and non-treated areas: crop stand, root development, rate of growth, plant colour, vigour and yield.

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that Nufarm CHAPERONE Herbicide residues are still present, continue cropping only to those crops listed on the label and do not rotate to other crops until bioassay results indicate that susceptible crops are growing normally.

USE PRECAUTIONS:

- Do not apply Nufarm CHAPERONE Herbicide during periods of intense rainfall or to soils saturated with water.
- Do not apply directly to standing or running water. Do not apply in areas where surface water from the treatment site can run off to adjacent cropland, either planted or to be planted, or into bodies of water (such as streams, ponds, rivers, lakes, and irrigation water), wetlands, or wells. Applications should only be made when there is no hazard of spray drift contaminating non-target land areas since very small quantities of the Nufarm CHAPERONE Herbicide spray solution may severely injure susceptible crops and other sensitive terrestrial habitats during both growing and dormant periods.
- Do not apply to soybeans that have been stressed by severe weather conditions, frost, low fertility, drought, water saturated soil, disease or insect damage as crop injury may result.
- Under extreme weather conditions, such as hot, dry weather, excessive moisture, or frost, weed control may be reduced.
- Rainfall within 4 hours after application of Nufarm CHAPERONE Herbicide may reduce weed control.
- Because soybean varieties differ in their tolerance to herbicides, limit first use of Nufarm CHAPERONE Herbicide to a small area of each variety prior to adoption as a field practice.
- Overspray or drift to important aquatic and terrestrial wildlife habitats should be avoided. Leave a 16 metre buffer zone between the last spray swath and bodies of water such as ponds, lakes, rivers, and streams.
- Leave a 39 metre buffer zone between the last spray swath and wetlands, vegetated areas at the edges of bodies of water, woodlots and shelterbelts, and other terrestrial wildlife habitats.

- Nufarm CHAPERONE Herbicide must not be applied within 60 days of harvest.
- Make only one application of Nufarm CHAPERONE Herbicide per season.
- Do not graze the treated crop or cut for hay; sufficient data is not available to support such use.
- Do not apply Nufarm CHAPERONE Herbicide to soybean grown on soil of pH \geq 8.0 due to risk of rotational crop injury.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, Nufarm CHAPERONE Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to Nufarm CHAPERONE Herbicide and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field.

Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible rotate the use of Nufarm CHAPERONE Herbicide or other Group 2 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information and to report suspected resistance, contact Nufarm Agriculture Inc. company representatives at 1-800-868-5444 or at www.nufarm.ca

STORAGE AND DISPOSAL:

STORAGE:

Store product in original container in a secure, dry area away from seeds, fertilizer, plants and foodstuffs. Not for use or storage in or around the home. Keep container tightly closed.

DISPOSAL:

1. Make the empty container unsuitable for further use.
2. Dispose of the empty container in accordance with provincial requirements.

For information on the 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 cleanup of spills.

NOTICE TO USER:

This pest control product is to be used only in accordance with the directions on this 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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