

GROUP	2	HERBICIDE
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PEAK[®] 75WG Herbicide

HERBICIDE

AGRICULTURAL

Water Dispersible Granular (WG) Herbicide for Post-Emergent Broadleaf Weed Control in Field Corn, Forage Sorghum and Forage Millet

FOR SALE FOR USE IN EASTERN CANADA ONLY

GUARANTEE:

Prosulfuron..... 75%

**READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

CAUTION



POISON

REGISTRATION NUMBER: **25310**
PEST CONTROL PRODUCTS ACT

DO NOT SELL THE SOLUBLE BAGS INDIVIDUALLY

Syngenta Crop Protection Canada, Inc.
140 Research Lane, Research Park
Guelph, Ontario
N1G 4Z3

PAMPHLET

NOTICE TO USER

This 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 a control product under unsafe conditions.

NOTICE TO BUYER

Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a physician or contact a poison control centre **IMMEDIATELY**. Give the patient 1-2 glasses of water. **DO NOT** induce vomiting. The patient should lie down and remain calm and quiet. **NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

If in eyes, splash repeatedly with large amounts of clean water for at least 15 minutes. Obtain medical attention or contact a poison control centre.

If on skin, remove all contaminated clothing. Wash contaminated skin with soap and plenty of water. If irritation occurs, obtain medical attention.

If inhaled, remove individual from site of exposure.

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Remove patient to safe, uncontaminated area. If victim has ceased breathing, clear airway and start artificial respiration. Obtain medical attention.

TOXICOLOGICAL INFORMATION

No specific antidote is known. Apply symptomatic therapy. If a large amount has been ingested, induce emesis or lavage stomach. Five (5) mg/kg of activated charcoal suspension (50g/400 mL of water) can be given to absorb remaining toxicant.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. Harmful if swallowed. Avoid inhalation of dust or spray mist. Avoid contact with skin, eyes and clothing. Wear coveralls, chemical resistant gloves and boots during mixing/loading, application, equipment clean-up and repair. Do not eat, drink or smoke while mixing, or during application. Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before

reuse. Wash thoroughly with soap and water after handling. Handle and apply only as recommended on this label. Avoid application when weather conditions favour drift from treated areas. Avoid contamination of food and feed. Do not contaminate streams, lakes, ponds, wetlands, irrigation water, water used by livestock or for domestic purposes. Do not reuse package; see "DECONTAMINATION AND DISPOSAL".

Do not re-enter treated areas within 12 hours after application.

DO NOT APPLY BY AIR.

CAUTION: Do not graze or cut corn for forage within 60 days of application. Do not harvest grain within 120 days of application. Do not graze or cut sorghum or millet for forage within 60 days of 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., contact 1-866-375-4648 or www.cropro.org/.

STORAGE

Keep in original packaging during storage. Store above freezing in a dry, well-ventilated area away from other pesticides, fertilizers, food or feed. Prolonged storage at temperatures below 0 °C may cause the soluble bag to become brittle.

DECONTAMINATION AND DISPOSAL

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.

CONTAINER 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.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING
CALL 1-800-327-8633 (FASTMED)***

GENERAL INFORMATION

PEAK[®] 75WG herbicide is a water dispersible granular herbicide for selective post-emergent control of broadleaf weeds in field corn, forage sorghum and forage millet. PEAK 75WG herbicide is recommended for use in these crops in Eastern Canada. It is non-corrosive, non-flammable and non-volatile. PEAK 75WG herbicide is absorbed through the leaves and is rapidly translocated to the plant's growing points. PEAK 75WG herbicide has a high level of crop safety and is active on many broadleaf weeds at a variety of growth stages.

For broadleaf weed control, PEAK 75WG herbicide must be used only in tank mix with one of the following herbicides (Banvel[®] II or Cadence[®] 70WG). The tank mix components are added at rates of approximately one half of the normal use rates. The resulting PEAK 75WG herbicide tank mix will provide superior crop safety and control of a broad-spectrum of broadleaf weeds over a wide range of application timing.

The PEAK 75WG herbicide tank mix combines the activity of two distinct modes of action that controls weeds in two separate ways.

Thorough coverage of the weeds is essential for effective control with the PEAK 75WG herbicide tank mixes. Depending on the weed species and growing conditions, visual symptoms of dying weeds (discolouration) take 1-3 weeks to appear. Symptoms are first visible in the youngest tissues. Death of plants usually occurs 2-4 weeks after application. Under unfavourable environmental conditions such as drought, heat, flooding, prolonged cool temperatures or insufficient fertility, adequate control may not be achieved and re-growth may occur.

Weed control may also be reduced if the crop canopy has closed in over the weeds, intercepting the spray.

Certain other crops may be sensitive to low concentrations of PEAK 75WG herbicide in the soil. Therefore, careful consideration should be given to crop rotation plans prior to using PEAK 75WG herbicide (refer to "RECROPPING GUIDELINES").

DIRECTIONS FOR USE – CORN

BROADLEAF WEED CONTROL

Timing of Application:

Apply PEAK 75WG herbicide as a broadcast spray, with a tank mix partner and a recommended surfactant, to **corn between the two and seven leaf stages**. Since corn is very tolerant to PEAK 75WG herbicide, application timing should be determined by weed growth. For optimum results, apply to actively growing weeds in the recommended leaf stage (Refer to "WEEDS CONTROLLED" section of the label).

Surfactant:

PEAK 75WG herbicide must be applied with a recommended non-ionic surfactant or crop oil concentrate (Refer to "MIXING AND SPRAYING INSTRUCTIONS").

Tank Mixing:

PEAK 75WG herbicide must be tank mixed with either a non-ionic surfactant (Agral 90[®], Agsurf[®] or Citowett Plus[®]) or a Crop Oil Concentrate (Canplus 411[®] or Assist[®]) plus one of Banvel II herbicide or Cadence 70WG herbicide. **Do not use Crop Oil Concentrate if tank mixing with all Ultim[®] herbicide formulations or Accent[®] herbicide.** See table below.

USE RATE	AREA TREATED
13.3 g/ha of PEAK 75WG herbicide + Non-ionic surfactant at 0.2% v/v <u>or</u> Crop oil concentrate at 1.0% v/v <u>plus one of</u> Banvel II herbicide at 0.3 L/ha <u>or</u> Cadence 70WG herbicide at 0.2 kg/ha	PEAK 75WG herbicide: at this rate, 1 soluble bag treats 1 ha (2.5 acres)

PEAK 75WG herbicide + Banvel II herbicide or Cadence 70WG herbicide + surfactant	
Weeds Controlled:	Recommended Growth Stage at Application:
Buckwheat, Wild	1 - 6 leaves
Cocklebur*	1 - 6 leaves
Lady's Thumb	1 - 4 leaves
Lamb's-Quarters (including triazine-tolerant biotypes)	1 - 6 leaves
Mustard, Wild	2 - 12 leaves, prior to flowering
Pigweed, Redroot (including triazine-tolerant biotypes)	1 - 6 leaves
Ragweed, Common	1 - 8 leaves
Velvetleaf	1 - 6 leaves

* Controlled only with PEAK 75WG herbicide + Banvel II herbicide tank mix

BROADLEAF WEEDS AND ANNUAL GRASS CONTROL:

PEAK 75WG herbicide plus Banvel II herbicide or Cadence 70WG herbicide can be tank mixed with either Ultim herbicide or Accent herbicide to provide one-pass control of the broadleaf weeds and annual grass weeds as listed with each 3-way tank mix. See the table below for list of weeds controlled and rates of use for tank mixes containing Ultim herbicide or Accent herbicide. Apply tank mixes containing Ultim herbicide from the 2 to 6 leaf stage of corn. Tank mixes with Accent herbicide can be applied from the 2 to 7 leaf stages of corn.

WEEDS CONTROLLED	PEAK 75WG herbicide		BROADLEAF WEED PARTNER		GRASS CONTROL PARTNER	
		RATE		RATE		RATE
Buckwheat, Wild* (1-6 leaves) Lady's Thumb (1-4 leaves) Lamb's Quarters (including triazine tolerant biotypes) (1-6 leaves) Mustard, Wild (2-12 leaves, prior to flowering) Pigweed, Redroot (including triazine tolerant biotypes) (1-6 leaves) Ragweed, Common (1-8 leaves) Velvetleaf* (1-6 leaves) Green Foxtail* (1-6 leaves) Yellow Foxtail* (1-6 leaves) Barnyard Grass (1-6 leaves)	PEAK 75WG herbicide + a recommended non-ionic surfactant at 0.2% v/v	13.3 g/ha (1 soluble bag treats 1 ha)	Plus one of: Banvel II herbicide Or Cadence 70WG herbicide	0.3 L/ha 0.2 Kg/ha	Plus: Accent herbicide	33.4 g/ha (1 soluble bag treats 1 ha)

* suppression only

WEEDS CONTROLLED	PEAK 75WG herbicide		BROADLEAF WEED PARTNER		GRASS CONTROL PARTNER	
		RATE		RATE		RATE
Buckwheat, Wild (1-6 leaves)	PEAK 75WG herbicide + a recommended non-ionic surfactant at 0.2% v/v	13.3 g/ha (1 soluble bag treats 1 ha)	Plus one of:	0.3 L/ha	Plus:	100g/ha (1 soluble bag treats 1 ha)
Lady's Thumb (1-4 leaves)			Banvel II herbicide		Ultim 25DF herbicide	
Lamb's Quarters (including triazine tolerant biotypes) (1-6 leaves)			Or		Or	
Mustard, Wild (2-12 leaves, prior to flowering)			Cadence 70WG herbicide		Ultim 37.4DF herbicide	
Pigweed, Redroot (including triazine tolerant biotypes) (1-6 leaves)					Or	
Ragweed, Common (1-8 leaves)					Ultim 75DF herbicide	
Velvetleaf* (1-6 leaves)						
Green Foxtail (1-6 leaves)						
Yellow Foxtail** (1-6 leaves)						
Barnyard Grass (1-6 leaves)						

* Suppression only

** Suppression only with PEAK 75WG herbicide + Cadence herbicide+ Ultim herbicide

USE PRECAUTIONS:

- Do not apply PEAK 75WG herbicide where its movement in the soil may place it in contact with non-target plants or their roots.
- Do not use soils treated with PEAK 75WG herbicide for gardens, lawns, etc. without consulting the "RECRIPPING GUIDELINES" section.
- Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders, water bodies and woodlots should be avoided. Leave buffer zones

between the last spray swath and the edge of any of these habitats as indicated in the following table:

When PEAK 75WG herbicide is Tank-Mixed with:	Leave a Buffer Zone of:
Banvel II or Cadence 70WG herbicide	20 metres
Banvel II, Cadence 70WG + Ultim herbicide	20 metres
Banvel II, Cadence 70WG + Accent herbicide	22 metres

- Do not apply PEAK 75WG herbicide under conditions where uniform coverage at label rates cannot be obtained. Avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from an excess application.
- Do not allow spray or spray mist to drift onto adjacent sensitive crops or onto land which will be rotated to sensitive crops (see "*RECROPPING GUIDELINES*" section). Do not drain or flush spray equipment on or near desirable vegetation.
- Do not use flood jet nozzles or controlled droplet application equipment.
- For maximum crop safety, do not apply PEAK 75WG herbicide to corn which has been treated with an organophosphorus insecticide, such as Counter[®]. If an IR corn hybrid is planted, organophosphorus insecticides can be used according to label directions without increasing the likelihood of injury to those hybrids when PEAK 75WG herbicide is applied.
- Do not apply when environmental conditions such as wind speed, temperature, relative humidity etc. are favourable for drift to occur.
- Do not apply to terrain where there is a potential for surface run-off to enter aquatic systems.
- **Read and follow all use directions, restrictions and precautions of any products to be tank mixed with PEAK 75WG herbicide.**

MIXING AND SPRAYING INSTRUCTIONS:

GROUND APPLICATION ONLY:

WATER VOLUME:

Minimum of 150 litres per hectare.

Do not use liquid fertilizer as a carrier for PEAK 75WG herbicide applications. Liquid fertilizer may prevent the water-soluble bags from dissolving properly.

SPRAY PRESSURE:

200 - 300 kPa

SPRAY NOZZLES:

Flat Fan with 50 mesh or larger screens. For uniform coverage and increased penetration of the crop canopy, set the nozzles at a downward angle of 90 degrees (90°).

SURFACTANT:

PEAK 75WG herbicide + Banvel II herbicide or Cadence 70WG herbicide **must** be applied with either:

- a) a recommended non-ionic surfactant such as Agral 90 , Ag-Surf or Citowett Plus at 0.2% v/v (2.0 L for each 1000 L of spray mixture); or
- b) a crop oil concentrate such as Canplus 411 at 1.0% v/v (10 L for each 1000 L of spray mixture).

Do not use a crop oil concentrate if tank mixing with all Ultim herbicide formulations or Accent herbicide.

Do not apply if rain is expected within 4 hours after spraying.

MIXING PROCEDURE:

1. Ensure that the sprayer is totally clean.
2. Fill the spray tank three quarters full with water. Engage gentle agitation.

NOTE: Growers using a sprayer with by-pass agitation should allow the water-soluble bags to completely dissolve before engaging the by-pass. Otherwise, undissolved bags could be sucked into the by-pass and plug the main screen.

3. Ensure the agitation system is working properly and that it creates a rippling or rolling action on the water surface.
4. Add the appropriate number of water-soluble bags of PEAK 75WG herbicide and Ultim herbicide or Accent herbicide, if being used, directly into the spray tank. Do not touch water-soluble bags with wet gloves. Allow eight (8) minutes for complete mixing. The water-soluble bag may become brittle with age and exposure to cold temperatures. Longer mixing time may be required if the bag is brittle or if the water is cold.
5. Ensure PEAK 75WG herbicide and Ultim herbicide or Accent herbicide, if being used, is completely in suspension before adding the desired broadleaf weed tank-mix partner. Agitate an additional 2 to 3 minutes, then add a recommended non-ionic surfactant at 0.2% v/v (2.0 L for each 1000 L of water) or crop oil concentrate at 1.0% v/v (10 L for each 1000 L of water).

Do not use a crop oil concentrate if tank mixing with all Ultim herbicide formulations or Accent herbicide.

6. Continue agitation while completing the filling of the sprayer.
7. Continuous agitation is required to keep PEAK 75WG herbicide in suspension. Do not allow the spray mixture to stand without agitation.
8. Use the spray suspension as soon as it is prepared.
9. Water Soluble Bags must be dissolved in clean water. After spraying a tank load, some of the mixture will remain in the bottom of the tank. For repeat tank loads, pre-slurry PEAK 75WG herbicide in 10 litres of clean water (in a pail) prior to adding to the spray tank.
10. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

RECROPPING GUIDELINES:

Certain crops have been shown to be highly sensitive to low residues of PEAK 75WG herbicide in the soil. The risk of injury to rotational crops is affected by the application rate and by a combination of factors including soil parameters (i.e. soil type, soil temperature, soil pH), sensitivity of the rotational crop, rainfall levels and the recropping interval. The breakdown process is more rapid under conditions of high soil moisture, high soil temperature, and low soil pH. Degradation is generally slower under conditions of low soil moisture, low soil temperature, and high soil pH. The minimum recropping interval is the time between the last application of PEAK 75WG herbicide and the anticipated date of planting of the next crop.

To avoid injury to subsequent crops after an application of the recommended rate of PEAK 75WG herbicide, the following recropping intervals should be observed.

RECROPPING GUIDELINES

CROP	MINIMAL INTERVAL (MONTHS)
Field Corn, Spring Barley, Spring Oats, Peas, Soybeans, White Beans	10
Alfalfa	22
All Other Crops	Field Bioassay

Observe the recropping guidelines of any product to be tank mixed with PEAK 75WG herbicide. Land treated with PEAK 75WG herbicide CAN ONLY BE PLANTED TO A CROP NOT LISTED IN THE PRECEDING TABLE if a field bioassay can be successfully performed. The bioassay must indicate normal growth with no yield reductions.

When conducting a field bioassay, it is very important to select a representative area(s) of the field previously treated with PEAK 75WG herbicide to plant the test crop(s).

FIELD BIOASSAY

Representative Sample:

Ensure that soil parameters such as soil texture, depth of top soil layer, soil pH and drainage of the test area selected are representative of the remainder of the field.

Sample Size:

The seeded area of each selected bioassay crop must be large enough to ensure that reliable results are obtained. The seedbed preparations and seeding of the bioassay crop(s) should be conducted the same way as when the entire field would be planted.

Other Residual Herbicides:

It is important that other herbicide products which are known to have residual activity were not applied to the field between the last application of PEAK 75WG herbicide and the bioassay testing period. Avoid the use of other pesticides during the duration of the bioassay as they may damage the indicator crop(s).

Comparisons:

Ideally, an untreated check strip in a neighbouring field should be established and monitored for comparison since growing conditions can vary greatly from year to year and may result in erroneous results.

Assessment:

The site should be monitored regularly throughout the growing season. Watch for any damage to the crop such as thinning, yellowing or stunting. A yield sample should be taken and compared to an adjacent untreated field.

DO NOT ROTATE TO OTHER CROPS UNTIL THE BIOASSAY INDICATES NORMAL GROWTH WITH NO YIELD REDUCTIONS.

Failure to follow these recropping guidelines could result in injury to seeded crop(s).

SPRAYER CLEANUP:

To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying. Ensure that all traces of the product are removed. The following procedures are recommended:

1. Drain and flush tank, boom and all hoses for several minutes with clean water containing a household detergent. **Do not** clean the sprayer near desirable vegetation, wells or other water sources.
2. Fill the sprayer tank with clean water and add one litre of household ammonia (containing 3% ammonia) per 100 litres of water. Allow the solution to agitate for 15 minutes prior to flushing the solution through the boom and nozzles. Drain the system.
3. Remove the nozzles and screens and wash separately in a bucket containing the ammonia solution.
4. Thoroughly rinse the tank, hoses, booms, nozzles and screens with clean water for a minimum of 5 minutes to remove all traces of ammonia.
5. Dispose of all rinsings in accordance with provincial regulations.

CAUTION: Do not use ammonia in conjunction with chlorine bleach as this could result in the release of chlorine gas which can cause severe eye, nose, throat and lung irritation. Do not clean sprayer equipment in an enclosed area.

NOTE TO BUYER/USER:

The DIRECTIONS FOR USE for this product for the control of broadleaf weeds in forage sorghum and forage millet were developed by persons other than Syngenta Crop Protection Canada, Inc. Syngenta Crop Protection Canada, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used to control broadleaf weeds in forage sorghum and forage millet.

Accordingly, the Buyer and User assume all liability arising, and agree to hold Syngenta Crop Protection Canada, Inc. harmless, from any claims based on efficacy and/or phytotoxicity in connection with the use on forage sorghum or forage millet described below.

Ground application only. Do not apply by air. Make only one post emergent application per year. Do not graze or cut sorghum or millet for forage within 60 days of application.

USE DIRECTIONS:**Timing of Application:**

Apply PEAK 75WG herbicide as a broadcast spray, with Banvel II herbicide and a recommended surfactant, to **forage sorghum or forage millet between the three and five leaf stages**. For optimum results, apply to actively growing weeds when they are in the one to six leaf stage.

Surfactant:

PEAK 75WG herbicide must be applied with a recommended non-ionic surfactant or crop oil concentrate (See below).

Tank Mixing:

PEAK 75WG herbicide must be tank mixed with either a non-ionic surfactant (Agral 90, Agsurf or Citowett Plus) or a Crop Oil Concentrate (Canplus 411 or Assist) plus Banvel II.

USE RATE	AREA TREATED
13.3 g/ha of PEAK 75WG herbicide + non-ionic surfactant at 0.2% v/v <u>or</u> crop oil concentrate at 1.0% v/v <u>plus</u> Banvel 480 or Banvel II herbicide at 0.3 L/ha	At this rate, 1 soluble bag of PEAK 75WG herbicide treats 1 ha (2.5 acres)

Weeds Controlled:

Cocklebur, Lady's Thumb, Lamb's-Quarters (including triazine-tolerant biotypes),
 Wild Mustard, Redroot Pigweed (including triazine-tolerant biotypes),
 Common Ragweed, Velvetleaf

Resistance-Management Recommendations

For resistance management, Peak 75WG is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to Peak 75WG 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 Peak 75WG 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 company representatives at 1-87S-YNGENTA (1-877-964-3682) or at www.syngenta.ca.

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