GROUP 4 6 HERBICIDES

# **ENFORCER D HERBICIDE**

#### **Emulsifiable Concentrate**

# FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES, PEACE RIVER REGION AND INTERIOR OF BRITISH COLUMBIA

For use as a selective postemergent control of annual and perennial broadleaf weeds in wheat and barley.

## **AGRICULTURAL**

# **READ THE LABEL & BOOKLET BEFORE USING**



# **EYE & SKIN IRRITANT**

# **KEEP OUT OF REACH OF CHILDREN**

REGISTRATION NO.: 30690 PEST CONTROL PRODUCTS ACT

# **ACTIVE INGREDIENT:**

Fluroxypyr, present as 1-methylheptyl ester ... 80 g a.e./L Bromoxynil, present as octanoate ester ... 190 g/L 2,4-D, present as 2-ethylhexyl ester ... 240 g a.e./L

> Nufarm Agriculture Inc. 5101, 333 - 96th Ave NE Calgary, Alberta T3K 0S3 1-800-868-5444

Net Contents: (1 – Bulk) Litres

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

2019-12-03

## **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN.

HARMFUL OR FATAL IF SWALLOWED.

CAUTION - eye and skin irritant. Avoid contact with skin, eyes and clothing. Wash concentrate from skin or eyes immediately.

Avoid breathing spray mist. After use wash hands and other exposed skin.

DO NOT APPLY USING AERIAL APPLICATION EQUIPMENT

Avoid contamination of ponds, streams, rivers and other water sources.

Avoid spray drift onto crops other than those recommended.

Store the container tightly closed away from seeds, feeds, fertilizer, plant and foodstuffs.

DO not use in residential areas. Residential areas are defined as any use site where bystanders, including children, could be exposed during or after application. This includes homes, schools, parks, playgrounds, playing fields, public buildings, or any other area where the general public, including children, could be exposed.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

# **PROTECTIVE CLOTHING AND EQUIPMENT:**

Only handlers wearing personal protective equipment may be in the area being treated during application.

During mixing, loading, clean-up and repair, workers must wear coveralls over a long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks. Rinse gloves before removal. During application, workers must wear a long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks. Gloves are not required during application within a closed cab.

After using this product, remove clothing and launder separately and promptly and thoroughly wash hands and exposed skin with soap and water. Keep and wash personal protective equipment separate from household laundry.

Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. DO NOT reuse them.

# **ENVIRONMENTAL PRECAUTIONS:**

This product contains active ingredients and aromatic petroleum distillates which are toxic to aquatic organisms.

2019-12-03

TOXIC to non-target terrestrial plants and aquatic organisms. Observe buffer zones specified under DIRECTIONS FOR USE.

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 the treated area and the edge of the water body.

This product will harm other broadleaved plants in the vicinity of the treatment area.

Do not directly spray or allow the spray to drift onto ornamentals or gardens.

Do not irrigate within 24 hours after application.

#### **LEACHING**

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.

# **FIRST AID:**

**If swallowed:** call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.

**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 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.

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

#### **TOXICOLOGICAL INFORMATION:**

Contains petroleum distillates - vomiting may cause aspiration pneumonia. This product may cause mild irritation to the eyes. Overexposure to 2,4-D may cause coughing, burning, dizziness or temporary loss of muscle coordination. Other possible effects of overexposure include fatigue, muscle weakness or nausea. Treat symptomatically.

# **EMERGENCY TELEPHONE NUMBERS:**

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

For health or environmental emergencies, ProPharma Group, 1-877-325-1840.

For product and use information, Nufarm Agriculture Inc., 1-800-868-5444.

# **STORAGE CONDITIONS:**

To prevent contamination, store this product away from food or feed. Store in original containers in a secure, dry, heated storage. If product is frozen, bring to room temperature and agitate before use. Do not allow contamination of seeds, plants, fertilizers or other pesticides.

If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste. Shake well before using.

# **DISPOSAL:**

# For Recyclable Containers:

Do not reuse this container for any purpose. This is a recyclable container and is to be disposed or 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.

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# For Returnable-Refillable Containers:

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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.

[Booklet]

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# **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.

# **GENERAL INFORMATION:**

Enforcer D Herbicide provides selective post-emergence control of annual and perennial broadleaf weeds in wheat and barley.

# **DIRECTIONS FOR USE:**

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/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**DO NOT** apply using aerial application equipment.

**Rotational Crop Restrictions:** Fields previously treated with Enforcer D Herbicide can be seeded the following year to barley, canola, flax, forage grasses, lentils, mustard, oats, peas, rye and wheat or fields can be summerfallowed.

**Product Specific Precautions:** Read and understand the entire label before opening this product. If you have questions, call the manufacturer or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

#### **GROUND SPRAYER:**

Wash the tank and clean all filters, screens and tips. Select nozzle tips to apply the recommended volume per hectare. Flood jet type tips are not recommended. Adjust boom height to ensure uniform coverage of the weeds. Ensure that all tips are in good condition and spraying the same volume.

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 S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

#### **USE PRECAUTIONS:**

Avoid spray drift unto any desirable vegetation NOT listed on this label as damage may occur. Avoid contamination of ponds, streams, rivers, lakes and other water sources. Do not spray during periods of high temperatures when crops may be under stress or damage to the crop may occur.

# MIXING:

Half fill the tank with clean water. Add the required amount of Enforcer D Herbicide and agitate thoroughly. Add any tankmix partners. Fill the tank and agitate again before use.

# **Buffer zones:**

Spot treatments using hand-held equipment DO NOT require a buffer zone.

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), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

	Crop	Buffer zones (metres) required for the protection of:				
		Freshwater habitat of		Estuarine/marine		Terrestrial
Method of		depths:		habitats of depths:		habitat
application		Less than	Greater	Less than	Greater	
		1 m	than 1 m	1 m	than 1 m	
Field	Wheat and	1	1	1	1	1
sprayer	barley					

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (asae) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

# RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Enforcer D Herbicide is a Group 4 and 6 herbicide. Any weed population may contain or develop plants naturally resistant to Enforcer D Herbicide and other Group 4 and 6 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 Enforcer D Herbicide or other Group 4 and 6 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

#### **CROPS:**

- WHEAT (spring and durum)
- BARLEY

APPLICATION RATE: 0.6 - 1.2 L/ha

Do not apply more than one treatment per year.

## **APPLICATION RESTRICTIONS:**

- Do not use treated crops for grazing livestock or green feed until 30 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.
- Do not harvest the treated crop within 60 days after application.

**SPRAY VOLUME AND PRESSURE:** Enforcer D Herbicide must be applied in volume rates of not less than 50 L/ha and at a pressure of 275 kPa. For best results when there is a heavy crop canopy, or when the majority of the weeds are at advanced stage of growth, a volume rate of 100 L/ha is recommended.

**TIMING:** Wheat (spring and durum) and barley may be treated from the 4-leaf stage until the early flag leaf stage. Application before the 4-leaf stage may injure the crop. Apply in good growing conditions.

Apply when weeds are in the seedling stage (up to 5 leaf stage) and actively growing. Application must be made before the crop shields the weeds.

#### **WEEDS CONTROLLED:**

## **Section 1 - Enforcer D Herbicide ALONE**

Enforcer D Herbicide Rate	Broadleaf Weeds Controlled or Suppressed			
0.6 L/ha	broadleaf plantain	lamb's quarters		
	cleavers	night flowering catchfly		
	common groundsel	shepherd's purse		
	kochia (up to 5 cm tall)	stinkweed		
	hemp-nettle	stork's bill		
	knotweed	volunteer canola		
	lady's thumb	wild mustard		
1.2 L/ha	Weeds listed above plus:			
	Canada thistle (suppression)	round-leaved mallow		
	dandelion	Russian thistle		
	field horsetail	volunteer flax		
	redroot pigweed	wild buckwheat		

NOTE: Enforcer D Herbicide activity is influenced by weather conditions. Optimum activity requires active crop and weed growth. The temperature range for optimum activity is 12 to 24 °C. Reduced activity will occur when temperatures are below 8 °C or above 27 °C. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance. Weed control may be reduced during stress conditions, e.g. drought, heat or cold stress, or if weeds have initiated flowering, or if heavy infestations exist.

#### Section 2 - Enforcer D Herbicide in Tank Mix with other herbicides

# **TANK MIXTURES:**

When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

Enforcer D Herbicide can be tank mixed with the following herbicides:

1. Nufarm Tralkoxydim Herbicide or Achieve Liquid Herbicide (spring wheat, durum wheat

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and barley

- 2. Signal Herbicide or Nufarm Clodinafop Herbicide (for spring wheat and durum wheat only)
- 3. Cordon EC or Puma Advance Herbicide (for spring wheat, durum and barley)
- 4. Everest Solupak 70 DF (for spring wheat and durum wheat only)
- 5. Varro Herbicide (for spring wheat and durum wheat only)
- 6. Simplicity (for spring wheat and durum wheat only)
- 7. Enforcer D Herbicide plus Nufarm Boost Herbicide for suppression of Narrow-leaved Hawk's beard

Enforcer D Herbicide + Nufarm Boost Herbicide (wheat (spring and durum) and barley)				
Weeds Controlled:	See Section 1, plus suppression of Narrow-leaved Hawk's beard			
<b>Crop Treatment Stage:</b>	From the 4-leaf to early flag-leaf stage.			
Application Method:	Ground application only. DO NOT APPLY USING AERIAL APPLICATION			
	EQUIPMENT.			
	Apply in at least 100 litres of water per hectare.			
Application Rate:	0.6 – 1.2 L/ha Enforcer D Herbicide + 6.7 g/ha Nufarm Boost			
	Herbicide + surfactant as required on the Nufarm Boost Herbicide			
	label directions.			

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Nufarm Agriculture Inc. at 1-800-868-5444 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by Nufarm Agriculture Inc.

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