

2022-0398
2023-07-04

(Sleeve)

GROUP 4 6 HERBICIDES

Oxbow™ Herbicide

Emulsifiable Concentrate

**For use in
Wheat and Barley**

COMMERCIAL (AGRICULTURAL)

READ THE LABEL & BOOKLET BEFORE USING



DANGER

POISON

**SKIN IRRITANT
POTENTIAL SKIN SENSITIZER**

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO.: 34883
PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENTS:

Bromoxynil, present as mixed heptanoate and octanoate esters ... 174 g/L
Dichlorprop-p, present as 2-ethylhexyl ester ... 435 g/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

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PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN.

FATAL IF SWALLOWED.

MAY IRRITATE THE SKIN. POTENTIAL SKIN SENSITIZER.

Avoid contact with skin, eyes and clothing.

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

Wash concentrate from skin or eyes immediately.

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

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

Avoid spray drift onto crops other than those recommended.

DO NOT use in residential areas, which are defined as sites where bystanders may be present during or after spraying, including homes, schools, parks, playgrounds, playing fields, and public buildings.

Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions 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.

PROTECTIVE CLOTHING AND EQUIPMENT:

Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, clean-up and repair.

For application using ground equipment: Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Gloves are not required during application within a closed cab.

For application using aerial equipment: Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Gloves are not required during application within a closed cockpit.

DO NOT allow the pilot to mix chemicals to be loaded onto the aircraft. The pilot is allowed to load premixed chemicals with a closed system.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

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

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After using this product, remove clothing and launder separately and promptly and thoroughly wash hands and exposed skin with soap and water. Follow manufacturer's instructions for cleaning personal protective clothing and equipment. If no such instructions for washables are provided, use detergent and hot water. Keep and wash personal protective equipment separate from household laundry. Wear freshly laundered clothing and clean protective equipment daily.

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

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

TRANSFER SYSTEM: Use a closed pump transfer system that avoids open pouring when transferring the liquid concentrate from such containers into the spray tank.

ENVIRONMENTAL PRECAUTIONS:

This product contains an active ingredient and aromatic petroleum distillates, which are toxic to aquatic organisms. Toxic to non-target terrestrial plants.

Observe spray buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. 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 filter strip between the treated area and the edge of the water body.

FIRST AID:

If swallowed, call a poison control centre or doctor immediately for treatment advice. Do not give **any** liquid to the person. 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 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.

In on skin/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.

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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 at greater than 10% - vomiting may cause aspiration pneumonia. This product may cause mild irritation to the eyes. Treat symptomatically.

STORAGE :

Store this product away from food or feed. *Shake well before using.*

Oxbow Herbicide formulation will solidify at temperatures below -20°C but will become useable at temperatures above 0°C .

~~Insecticides and fungicides should be separated from herbicides so as to prevent the possibility of cross contamination.~~

DISPOSAL:

For Recyclable Containers:

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.
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Disposal of unused, unwanted product

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.

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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.

NOTICE TO USER:

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(Booklet)

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NOTICE TO USER:

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

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, **Oxbow Herbicide** is a Group 4 and 6 herbicide. Any weed population may contain or develop plants naturally resistant to **Oxbow 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 **Oxbow Herbicide** or other Group 4 and 6 herbicides within a growing season (sequence) or among growing seasons 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possibly by an alternative herbicide from a different group.

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- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- 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

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. For ground applications, spray at 5 to 10 kph. Ensure that all tips are in good condition and spraying the same volume.

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

AERIAL APPLICATION:

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution, along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

Apply only by fixed-wing or rotary aircraft equipment that has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rate and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices. No human flaggers are permitted.

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Use Precautions:

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Product Specific Precautions:

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-868-5444 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:

Volume: Oxbow Herbicide must be applied in volume rates of not less than 30 L/ha. For best results when there is a heavy crop canopy, or when the majority of the weeds are cow cockle, smartweed or pigweed, a volume rate of 40 L/ha is recommended.

SPRAY BUFFER ZONES A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray 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.

<u>Method of application</u>	<u>Crop</u>	<u>Spray Buffer Zones (metres) Required for the Protection of:</u>				
		<u>Freshwater Habitat of Depths:</u>		<u>Estuarine/Marine Habitat of Depths:</u>		<u>Terrestrial Habitat:</u>
		<u>Less than 1 m</u>	<u>Greater than 1 m</u>	<u>Less than 1 m</u>	<u>Greater than 1 m</u>	
<u>Field sprayer</u>	<u>Wheat and barley</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>
<u>Aerial</u>	<u>Wheat and barley</u>	<u>10</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>30</u>
	<u>Fixed wing</u>	<u>10</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>30</u>
	<u>Rotary wing</u>	<u>10</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>30</u>

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray 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 spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

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USE PRECAUTIONS:

Avoid spray drift unto any desirable vegetation NOT listed on this label as damage may occur. Do not spray during periods of high temperatures when crops may be under stress or damage to the crop may occur.

TIMING:

Wheat (spring and durum) and barley may be treated from the 3-leaf stage to prior to the flag-leaf stage. Application before the 3-leaf stage may injure the crop. Do not apply more than one treatment per year.

Winter wheat may be treated in the spring from early tillering to prior to the flag-leaf stage (Zadoks 21-36).

MIXING:

Half fill the tank with clean water. Add the required amount of **Oxbow Herbicide** and agitate thoroughly. Fill the tank and agitate again before use.

WHEAT AND BARLEY:

(not under-seeded to legumes)

SPRAY VOLUME AND PRESSURE: For ground application, apply in 50 to 100 L of water per hectare at a pressure of 275 kPa. For aerial application, see **AERIAL APPLICATION** section.

APPLICATION RATE: 1.2-1.6 L/ha (0.5-0.65 L/ac) for both aerial and ground applications. Use the low rate in fields with smaller weeds and low populations. Use the high rate when the field has heavy weed pressure and weeds are within optimum staging as per the control chart below.

PRE-HARVEST INTERVALS:

- **DO NOT** harvest wheat or barley for grain within 60 days after application.
- **DO NOT** permit livestock to graze fields within 40 days after application.
- **DO NOT** harvest forage or cut for hay within 30 days after application.

PLANTBACK INTERVAL:

Observe a minimum plantback interval of 30 days.

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

WEEDS CONTROLLED:

Common Name	Leaf Stage*
Bluebur	4-leaf
Broadleaf plantain	4-leaf
Chickweed	4-leaf

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Cocklebur	4-leaf
Common ragweed	4-leaf
Cow cockle	4-leaf
False cleavers	4-whorls
Green smartweed	4-leaf
Kochia	5 cm high (1- to 12-leaf)
Lady's-thumb	4-leaf
Lamb's-quarters	8-leaf
Pale smartweed	4-leaf
Redroot pigweed (suppression only)	4-leaf
Russian thistle	5 cm high (2- to 12-leaf)
Stinkweed	8-leaf
Tartary buckwheat	8-leaf
Wild buckwheat	8-leaf
Wild mustard	8-leaf

*Weeds can be controlled up to the recommended stage. The level of weed control may be reduced when weeds are beyond leaf stage indicated.

TANK MIXTURES:

This product may be tank mixed with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Nufarm Agriculture Inc. at 1-800-868-5444 for information before applying any tank mix that is not specifically recommended on this label.