



Rezuvant™ B

Herbicide

GROUP	1	HERBICIDE
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FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA AND EASTERN CANADA

A post emergence herbicide for control of wild oats, green foxtail, yellow foxtail, barnyard grass, volunteer oats, volunteer canary seed and proso millet in Spring Wheat, Winter Wheat and Barley.

AGRICULTURAL

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

ACTIVE INGREDIENT: Pinoxaden 50 g/L
Contains Cloquintocet-mexyl at 12.5 g/L as a safener
Emulsifiable Concentrate

DANGER: EYE AND SKIN IRRITANT

REGISTRATION NO.: 33277 PEST CONTROL PRODUCTS ACT

NET CONTENTS: **1 L to bulk**

Dow AgroSciences Canada Inc.
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Calgary, Alberta
T2P 1M4
1-800-667-3852

PRECAUTIONS

- KEEP OUT OF THE REACH OF CHILDREN.
- Severely irritating to the skin. DO NOT get on skin. May irritate eyes. Avoid contact with eyes.
- Do not wear contact lenses when using.
- Avoid contact with clothing. Wear coveralls over a long sleeved shirt and long pants, chemical resistant gloves, socks and chemical resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear goggles or face shield and a chemical resistant apron during mixing, loading, clean-up and repair.
- Wash gloves thoroughly with soap and water before removing them during any operation.
- Wash hands thoroughly with soap and water after using this product and before eating, drinking or smoking.
- 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.
- Do not eat, drink or smoke while mixing, loading or during application.
- DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 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.

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 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 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.

TOXICOLOGICAL INFORMATION

Rezuvant™ B Herbicide contains materials that may cause severe pneumonitis if aspirated. Treat symptomatically for ingestion and/or skin and eye contact. THIS PRODUCT CONTAINS PETROLEUM DISTILLATES. VOMITING MAY CAUSE ASPIRATION PNEUMONIA.

ENVIRONMENTAL HAZARDS

TOXIC to non-target terrestrial plants. 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 the treated area and the edge of the water body.

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.

STORAGE

Keep in original container, tightly closed, during storage. Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reach of children and animals. Keep away from fire or open flame, or other sources of heat. If frozen, allow to thaw and agitate thoroughly prior to use.

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 cleanup of spills.

CONTAINER DISPOSAL:

FOR DISPOSAL OF PLASTIC JUGS:

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 REFILLABLE CONTAINERS:

For disposal, this empty container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

PRODUCT INFORMATION

Rezuvant B Herbicide is a systemic, post-emergence herbicide for the selective control of wild oats, green foxtail, yellow foxtail, barnyard grass, volunteer oats, volunteer canary seed and proso millet in Spring Wheat, Winter Wheat and Barley in the Prairie Provinces and the Interior of British Columbia and Eastern Canada.

Rezuvant B Herbicide is absorbed by the leaves and is rapidly translocated to the growing points of leaves and stems. Thorough coverage of the plants is essential for consistent control. Actively growing susceptible grasses stop growing within 48 hours of treatment. Depending on species, growing conditions and crop competition, leaves and growing points turn yellow within one to three weeks after application. Further colour changes and loss of vigour will be observed, followed by a browning and control three to five weeks after application.

DIRECTIONS FOR USE

CROPS: Spring Wheat, Winter Wheat and Barley

Rezuvant B Herbicide can be used on all varieties of Spring Wheat, Winter Wheat and Barley.

One application per year is permitted.

Observe a minimum interval to harvest of 60 days after treatment for grain and straw and of 30 days after treatment for hay. Observe a minimum of 7 days before grazing livestock on crops treated with Rezutant B Herbicide.

Do not apply on any crop other than Spring Wheat, Winter Wheat or Barley, as crop damage will result. Do not allow spray to drift to adjacent fields seeded to crops other than Spring Wheat, Winter Wheat or Barley. Do not treat Spring Wheat, Winter Wheat or Barley under-seeded to forages. Do not apply Rezutant B Herbicide on highly sensitive crops such as: Tame Oats, Proso Millet, Red Millet, Crown Millet or Canary Seed.

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 ASAE medium 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) medium classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotor span.

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rain, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).

Avoid application of this product 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.

Buffer zones:

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

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 shrub-lands).

Method of application	Crop	Buffer zones (metres) required for the protection of:
		Terrestrial habitat
Field sprayer	Spring wheat, winter wheat and barley	1
Aerial (Fixed or Rotary Wing)		25

* For field sprayer application, buffer zones can be reduced with the use of drift reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

ROTATIONAL CROP INFORMATION

For fields treated with Rezutant B Herbicide, no crop may be seeded until the following year. There are no crop rotation limitations the year following application of Rezutant B Herbicide.

WEEDS CONTROLLED: Wild Oats, Green Foxtail, Yellow Foxtail, Barnyard Grass, Volunteer Oats, Volunteer Canary Seed and Proso Millet

Perennial grasses such as quack grass will not be controlled.

TIMING OF APPLICATION:

CROP / WEEDS	GROWTH STAGE* (ZADOKS or BBCH)
SPRING WHEAT WINTER WHEAT BARLEY	1 leaf to flag leaf stage (11, 20 to 37)
WILD OATS GREEN and YELLOW FOXTAIL BARNYARD GRASS VOLUNTEER OATS VOLUNTEER CANARY SEED PROSO MILLET	1 – 6 leaf, prior to 4 th tiller (11, 20 to 16 and 23)

* Do not apply past flag leaf stage.

For optimum results, apply Rezuvant B Herbicide to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weeds emerging after application of Rezuvant B Herbicide will not be controlled.

Weed control following application of Rezuvant B Herbicide can be reduced or delayed under stress conditions such as drought, heat, insufficient fertility, flooding or prolonged cool temperatures. Grass escapes or re-tillering may occur if application is made during prolonged stress conditions. Optimum weed control will be obtained if application of Rezuvant B Herbicide is delayed until the stress conditions have ended and weeds are once again actively growing.

Rezuvant B Herbicide alone can be used one hour before rainfall.

Do not apply to crop that is stressed by conditions such as frost, low fertility, drought, flooding, disease or insect damage as crop injury may result.

RATE OF USE:

Apply the recommended rate of Rezuvant B Herbicide in 50 L to 100 L of water per hectare for ground application and in a minimum of 30 L of water per hectare for aerial application. Rezuvant B has a built-in adjuvant; thus no additional adjuvant is required.

CROP	WEEDS CONTROLLED	USE RATES	
SPRING WHEAT WINTER WHEAT BARLEY	WILD OATS GREEN and YELLOW FOXTAIL BARNYARD GRASS VOLUNTEER OATS VOLUNTEER CANARY SEED PROSO MILLET	Rezuvant B Herbicide	1200 mL/ha (0.5 L/acre)

NOTES: Do not tank mix with any other adjuvants, chemical additives, or fertilizers unless recommended on this label.

MIXING INSTRUCTIONS FOR GROUND APPLICATION:

1. Ensure that the sprayer interior is clean, then fill the spray tank with ½ the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add Rezuvant B (EC) herbicide and agitate to ensure complete mixing.
3. Fill the tank to ¾ the required amount of water.
4. Finish filling the sprayer with water, maintaining good agitation.
5. After any break in spraying operations, agitate thoroughly before spraying again.
6. Spray the herbicide suspension the same day as mixing.
7. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

SPRAYING INSTRUCTIONS FOR GROUND APPLICATION:

1. Water Volume: 50 to 100 litres per hectare.
2. Spray Nozzles: 80° or 110° pre-orifice flat fan or air induction nozzles are recommended. Use 50 mesh nozzle screens. Do not use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.
3. Pressure: As recommended by the nozzle manufacturer.
4. Apply uniformly at 6 - 8 km/hr and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to avoid potential crop injury from over application.

SPRAYER CLEAN-UP FOR GROUND APPLICATION:

Clean Up Before Spraying:

- Prior to using Rezuvant B Herbicide, ensure that the spray tank, lines and filter are thoroughly clean.

Clean Up After Spraying:

- Thoroughly clean application equipment immediately after spraying. To avoid subsequent injury to other crops, immediately after spraying and before spraying other crops, thoroughly remove all traces of Rezuvant B Herbicide from mixing and spraying equipment.
- The following recommendations are provided:
 1. Drain and flush tank walls, boom and all hoses for ten minutes with a clean water/detergent mixture. Rinse with clean water. **Do not** clean the sprayer near desirable vegetation, wells or other water sources.
 2. Remove all nozzles and screens and wash separately.
 3. Dispose of all rinsings in accordance with provincial regulations.

AERIAL APPLICATION

Instruction for Aerial Application

Apply Rezuvant B Herbicide in no less than 30 litres of water per hectare.

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

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.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

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

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

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.

Product Specific Precautions

- Read and understand the entire label before opening this product. If you have questions, call Dow AgroSciences Canada Inc. at 1-800-667-3852 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:

Apply in at least 30 litres of water per hectare.

Avoid spraying when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

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) medium classification. DO NOT allow nozzle spacing to exceed 65% of boom length.

DO NOT overspray non-target terrestrial or aquatic habitats. DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches, and wetlands), estuaries or marine habitats. 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, Rezuvant B Herbicide is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to Rezuvant B Herbicide and other Group 1 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 Rezuvant B Herbicide or other Group 1 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 possible by an alternative herbicide from a different group. 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 or to report suspected resistance, contact Dow AgroSciences Canada Inc. at 1-800-667-3852.

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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Specimen Label Notes:
Initial label