

Maxunitech Pinoxaden 100EC

Emulsifiable Concentrate
COMMERCIAL
AGRICULTURAL

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

FOR SALE FOR USE IN THE PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA (INCLUDING THE PEACE RIVER REGION) ONLY

ACTIVE INGREDIENT:

Pinoxaden..... 100 g/L

Contains Cloquintocet-mexyl at 25 g/L as a safener

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

REGISTRATION NO.: 35184

PEST CONTROL PRODUCTS ACT

EMERGENCY TELEPHONE NUMBERS:

For product and use information, Maxunitech North America Inc., 1-855-462-9621.
For spills or transportation accidents, Chemtrec, 1-800-424-9300.



Maxunitech North America, Inc.
11601 Shadow Creek Pkwy, Suite 111-573
Pearland, Texas, 77584, USA
Telephone: 1-855-462-9621

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.

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

Maxunitech Pinoxaden 100EC 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.**

PRECAUTIONS

1. KEEP OUT OF THE REACH OF CHILDREN.
2. Harmful if swallowed.
3. May irritate eyes. Do not wear contact lenses when using.
4. DO NOT get in eyes or on skin. Avoid contact with clothing. Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Chemical-resistant gloves are not required during application within a closed cab and/or 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.
5. Wash gloves thoroughly with soap and water before removing them during any operation.
6. Wash hands thoroughly with soap and water after using this product and before eating, drinking or smoking.
7. 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.
8. Do not eat, drink or smoke while mixing, loading or during application.
9. DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.
10. 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.

ENVIRONMENTAL PRECAUTIONS

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

This product contains aromatic petroleum distillates, which are toxic to aquatic organisms.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas 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.

STORAGE

Store this product away from food or feed.

Store the product in closed original container in a well-ventilated room. Keep out of reach of children, unauthorized persons and animals. Store separate from fertilizer.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL:

FOR RECYCABLE 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.
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/territorial requirements.

FOR REFILLABLE CONTAINERS:

For disposal, this 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

Maxunitech Pinoxaden 100EC is a systemic, post-emergence herbicide for the selective control of wild oats, green foxtail, yellow foxtail, Persian darnel, volunteer oats, volunteer canary seed, proso millet and barnyard grass in Spring Wheat, Durum Wheat and Barley in the prairie provinces and the Interior of British Columbia (including the peace river region) only.

Maxunitech Pinoxaden 100EC 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.

Although Maxunitech Pinoxaden 100EC does not control broadleaf weeds, Maxunitech Pinoxaden 100EC can be tank-mixed with a range of broadleaf herbicides to provide broad spectrum weed control in Spring Wheat, Durum Wheat and Barley. See section entitled “TANK MIXES of Maxunitech Pinoxaden 100EC WITH BROADLEAF WEED HERBICIDES” and refer to the appropriate Tank Mix section.

DIRECTIONS FOR USE

CROPS: Spring Wheat, Durum Wheat and Barley.

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.

Maxunitech Pinoxaden 100EC can be used on all varieties of Spring Wheat, Durum 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 Maxunitech Pinoxaden 100EC.

Do not apply on any crop other than Spring Wheat or Durum Wheat or Barley, as crop damage will result. Do not allow spray to drift to adjacent fields seeded to crops other than Spring Wheat or Durum Wheat or Barley. Do not treat Spring Wheat or Durum Wheat or Barley under-seeded to forages. Do not apply Maxunitech Pinoxaden 100EC 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 American Society of Agricultural Engineers (ASAE S572.1) 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 S572.1) medium classification. Reduce drift caused by turbulent wingtip vortices. Nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing- or rotorspan.

Spray Buffer Zones:

A spray buffer zone is NOT required for:

- hand-held or backpack sprayer and spot treatment

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)

Method of application	Crop		Spray buffer zones (metres) required for the protection of:
			Terrestrial habitat
Field sprayer	Durum Wheat, Spring Wheat and Barley		1
Aerial	Durum Wheat, Spring Wheat and Barley	Fixed or rotary wing	25

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.

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.

ROTATIONAL CROP INFORMATION

For fields treated with Maxunitech Pinoxaden 100EC, no crop may be seeded until the following year. There are no crop rotation limitations the year following application of Maxunitech Pinoxaden 100EC.

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

Perennial grasses such as quack grass will not be controlled.

TIMING OF APPLICATION:

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

* When tank-mixing with a broadleaf herbicide, always refer to the label of the broadleaf partner prior to use.

** Do not apply past flag leaf stage.

For optimum results, apply Maxunitech Pinoxaden 100EC to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weeds emerging after application of Maxunitech Pinoxaden 100EC will not be controlled.

Weed control following application of Maxunitech Pinoxaden 100EC alone, or in combination with broadleaf weed herbicides, 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 Maxunitech Pinoxaden 100EC is delayed until the stress conditions have ended and weeds are once again actively growing.

Maxunitech Pinoxaden 100EC 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 Maxunitech Pinoxaden 100EC and Merge® Adjuvant or Hasten NT Ultra Spray Adjuvant or Carrier 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. When tank-mixing Maxunitech Pinoxaden 100EC with a tank-mix partner, ensure you read the tank-mix partner label for minimum water recommendations.

CROP	WEEDS CONTROLLED	USE RATES	
SPRING WHEAT DURUM WHEAT BARLEY	PERSIAN DARNEL	Maxunitech Pinoxaden 100 EC Merge Adjuvant OR Hasten NT Ultra Spray Adjuvant or Carrier	400 mL/ha 700 mL/ha 0.5% v/v
	WILD OATS GREEN and YELLOW FOXTAIL VOLUNTEER OATS VOLUNTEER CANARY SEED PROSO MILLET BARNYARD GRASS	Maxunitech Pinoxaden 100 EC Merge Adjuvant OR Hasten NT Ultra Spray Adjuvant or Carrier	600 mL/ha 700 mL/ha 0.5% v/v

TANK MIXTURES

This product may be tank mixed with (a fertilizer, a supplement, or 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 a pest control product can result in reduced pesticide efficacy or increased host crop injury. The user should contact Maxunitech North America, Inc. at 1-855-462-9621 for information before applying any tank mix that is not specifically recommended on this label.

TANK MIXES WITH BROADLEAF WEED HERBICIDES:

For broad spectrum weed control of annual grasses and broadleaf weeds, Maxunitech Pinoxaden 100EC can be tank-mixed with broadleaf herbicides as described in the following table. Consult the label of the tank-mix partner for a list of broadleaf weeds controlled, rates, timing, recropping restrictions, grazing interval restrictions, recommendations for specific weeds, directions for use and precautions.

Tank-Mix Partner ¹	Product Rates
Refine® SG Herbicide ²	30 g/ha
Refine SG Herbicide + MCPA Ester ³ 500	30 g/ha + 560 - 700 mL/ha
Buctril® M	1.0 L/ha
Frontline™ XL Herbicide ³	1.25 L/ha
Curtail® M	1.5 to 2.0 L/ha
Spectrum™ Herbicide Tank Mix ³	100 mL/ha of Spectrum A Herbicide + 1.5 L/ha of Spectrum B Herbicide

Tank-Mix Partner¹	Product Rates
Thumper ^{®3} Emulsifiable Selective Weedkiller	1.0 L/ha
Mextrol 450 Liquid Herbicide	1.25 L/ha
2,4 D Ester (assume 600 series)	990 mL/ha
TILT [®] 250E Fungicide	250 to 500 mL
MCPA Amine (assume 500 series)	840 mL to 1.1 L/ha
MCPA Ester (assume 500 series)	840 mL to 1.1 L/ha
MCPA Ester (assume 600 series)	700 – 920 mL/ha
Infinity [®] Herbicide ⁴	0.83 L/ha
GF-184 Herbicide	1.0 L/ha

¹ Always consult the label of the broadleaf herbicide prior to use.

² Addition of surfactants other than Merge Adjuvant, Hasten NT Ultra Spray Adjuvant or Carrier are not required.

³ Suppression only of green foxtail.

⁴ For control of common ragweed and suppression of round-leaved mallow.

A reduction in barnyard grass control may be observed when Maxunitech Pinoxaden 100EC is tank mixed with these broadleaf herbicides.

When tank-mixing, always add the broadleaf herbicide(s) to the spray tank first; followed by Maxunitech Pinoxaden 100EC with Merge Adjuvant or Hasten NT Ultra Spray Adjuvant or Carrier added last.

For the appropriate rate of Maxunitech Pinoxaden 100EC with Merge Adjuvant or Hasten NT Ultra Spray Adjuvant or Carrier refer to the 'Rate of Use' section of the label.

Temporary crop injury may occur with tank-mixes under extreme weather conditions or when the crop is suffering from stress due to inadequate or abnormally high moisture levels or extreme temperatures.

MIXING INSTRUCTIONS FOR GROUND APPLICATION:

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide is to be used, add the product FIRST prior to adding Maxunitech Pinoxaden 100EC and agitate for 2-3 minutes.
3. Add correct amount of Maxunitech Pinoxaden 100EC.
4. Agitate for 2-3 minutes.
5. Add correct amount of Merge Adjuvant or Hasten NT Ultra Spray Adjuvant or Carrier.
6. Agitate for 1-2 minutes before adding remainder of water and then maintain constant agitation.
7. After any break in spraying operations, agitate thoroughly before spraying again.
- 8. Use the spray suspension as soon as it is prepared.**

SPRAYING INSTRUCTIONS FOR GROUND APPLICATION:

1. Water Volume: 50 to 100 litres per hectare.
2. Spray Nozzles: 80° or 110° flat fan nozzles are recommended for optimal spray coverage. Use 50 mesh nozzle screens. Do not use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.
3. Pressure: 275 - 310 kPa.
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 an over application.

SPRAYER CLEAN-UP FOR GROUND APPLICATION:

Clean Up Before Spraying:

- Prior to using Maxunitech Pinoxaden 100EC, 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 Maxunitech Pinoxaden 100EC from mixing and spraying equipment.
- When using tank mixes, consult the tank-mix partner label for additional cleanup instructions.
- 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/territorial regulations.

AERIAL APPLICATION

Instruction for Aerial Application

Apply Maxunitech Pinoxaden 100EC alone or in tank mixes (ONLY with the recommended tank mix partners that are registered for aerial use) 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.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-855-462-9621 or obtain technical advice from the distributor or your provincial/territorial 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.

Resistance-Management Recommendations

For resistance management, Maxunitech Pinoxaden 100EC is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to Maxunitech Pinoxaden 100EC 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 Maxumitech Pinoxaden 100EC 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 company representatives at 1-855-462-9621 or <https://chemicalsamerica.com/contact-chemicals-america>.

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