AXIAL® 100EC Herbicide

HERBICIDE

AGRICULTURAL

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

FOR SALE FOR USE ONLY IN THE PRAIRIE PROVINCES AND PEACE RIVER, OKANAGAN AND CRESTON FLATS REGIONS OF BRITISH COLUMBIA

GUARANTEE:
Pinoxaden ................................................................. 100 g/L

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

CAUTION

POISON

WARNING: EYE AND SKIN IRRITANT

REGISTRATION NO.: 28642
PEST CONTROL PRODUCTS ACT

Syngenta Crop Protection Canada, Inc.
140 Research Lane, Research Park,
Guelph, Ontario     N1G 4Z3
Telephone: 1-877-964-3682

PAMPHLET
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.

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

AXIAL 100EC Herbicide contains materials that may cause severe pneumonitis if aspirated. Treat symptomatically for ingestion and/or skin and eye contact. CONTAINS PETROLEUM DISTILLATES. DO NOT INDUCE VOMITING.

PRECAUTIONS

- KEEP OUT OF THE REACH OF CHILDREN.
- Harmful if swallowed.
- May irritate eyes. Do not wear contact lenses when using.
- DO NOT get in eyes or on skin. Avoid contact with clothing. Wear coveralls or long sleeved shirt and long pants, chemical resistant gloves, and goggles when mixing, loading or during equipment clean up or repair. Goggles and chemical resistant gloves are not required during application.
- 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 apply by air. Ground application only.
• 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, application equipment and sprayer settings.

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., visit CropLife Canada’s website at www.croplife.ca.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

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.

STORAGE

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

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:

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.

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

**PRODUCT INFORMATION**

AXIAL 100EC Herbicide is a systemic, post-emergence herbicide for the selective control of wild oats, green foxtail, yellow foxtail, volunteer oats, volunteer canary seed and proso millet in Spring Wheat and Barley in the prairie provinces and the Peace River, Okanagan, and Creston Flats Regions of British Columbia.

AXIAL 100EC 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.

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

**DIRECTIONS FOR USE**

**CROPS:** Spring Wheat and Barley.

AXIAL 100EC Herbicide can be used on all varieties of Spring 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 AXIAL 100EC Herbicide.

Do not apply on any crop other than Spring 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 Barley. Do not treat Spring Wheat or Barley under-seeded to forages. Do not apply AXIAL 100EC 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.

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:**

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, pastures, rangelands, and shrublands), and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, and wetlands).

<table>
<thead>
<tr>
<th>Method of application</th>
<th>Crop</th>
<th>Buffer zones (metres) required for the protection of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freshwater habitats of depths</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less than 1 m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terrestrial habitat</td>
</tr>
<tr>
<td>Field sprayer</td>
<td>Spring wheat and Barley</td>
<td>1</td>
</tr>
</tbody>
</table>

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.

**ROTATIONAL CROP INFORMATION**

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

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

Perennial grasses such as quack grass will not be controlled.
TIMING OF APPLICATION:

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

* 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 AXIAL 100EC Herbicide to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weeds emerging after application of AXIAL 100EC Herbicide will not be controlled.

Weed control following application of AXIAL 100EC Herbicide 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 AXIAL 100EC Herbicide is delayed until the stress conditions have ended and weeds are once again actively growing.

AXIAL 100EC 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 AXIAL 100EC Herbicide and ADIGOR™ Adjuvant in 50 L to 100L of water per hectare. When tank-mixing AXIAL 100EC Herbicide with a tank-mix partner, ensure you read the tank-mix partner for minimum water recommendations.

<table>
<thead>
<tr>
<th>CROP</th>
<th>WEEDS CONTROLLED</th>
<th>USE RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRING WHEAT BARLEY</td>
<td>WILD OATS GREEN and YELLOW FOXTAIL VOLUNTEER OATS VOLUNTEER CANARY SEED PROSO MILLET</td>
<td>AXIAL 100EC ADIGOR 600 mL/ha 700 mL/ha</td>
</tr>
</tbody>
</table>

NOTES: Do not tank mix with any other adjuvants, chemical additives, pesticides or fertilizers unless recommended on this label.
TANK MIXES WITH BROADLEAF WEED HERBICIDES:

For broad spectrum weed control of annual grasses and broadleaf weeds, AXIAL 100EC Herbicide 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.

<table>
<thead>
<tr>
<th>Tank-Mix Partner†</th>
<th>Product Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refine Extra†²</td>
<td>20 g/ha</td>
</tr>
<tr>
<td>Refine Extra² + MCPA Ester³</td>
<td>20 g/ha + 700 mL / ha</td>
</tr>
<tr>
<td>Buctril† M</td>
<td>1.0 L/ha</td>
</tr>
<tr>
<td>Frontline† Herbicide Tank Mix³</td>
<td>100 mL/ha of Frontline A + 840 mL/ha of Frontline B</td>
</tr>
<tr>
<td>Curtail† M</td>
<td>2.0 L/ha</td>
</tr>
<tr>
<td>Prestige† Herbicide Tank Mix</td>
<td>800 mL/ha of Prestige A + 2.0 L/ha of Prestige B</td>
</tr>
<tr>
<td>Trophy†</td>
<td>0.6 L/ha of Trophy A + 1.12 L/ha of Trophy B</td>
</tr>
<tr>
<td>Mextrol† 400 M</td>
<td>1.4 L/ha</td>
</tr>
<tr>
<td>Mextrol 450M</td>
<td>1.25 L/ha</td>
</tr>
<tr>
<td>MCPA Ester (assume 500 series)</td>
<td>840 mL to 1.1 L/ha</td>
</tr>
</tbody>
</table>

† Always consult the label of the broadleaf herbicide prior to use.
² Addition of surfactants other than ADIGOR are not required.
³ Suppression only of green foxtail.

When tank-mixing, always add the broadleaf herbicide(s) to the spray tank first; followed by AXIAL 100EC Herbicide with ADIGOR Adjuvant added last.

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:

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 AXIAL 100EC Herbicide and agitate for 2-3 minutes.
3. Add correct amount of AXIAL 100EC Herbicide.
4. Agitate for 2-3 minutes.
5. Add correct amount of ADIGOR Adjuvant.
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:

1. AXIAL 100EC Herbicide Tank Mix is for ground application only. DO NOT APPLY BY AIRCRAFT.
2. Water Volume: 50 to 100 litres per hectare.
3. 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.
5. 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:

Clean Up Before Spraying:
- Prior to using AXIAL 100EC 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 AXIAL 100EC Herbicide 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 regulations.

Resistance-Management Recommendations

For resistance management, AXIAL 100EC Herbicide is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to AXIAL 100EC 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 AXIAL 100EC Herbicide or other Group 1 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 or to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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