Pyroxasulfone 85 WG

Herbicide

For weed control in field corn

COMMERCIAL (AGRICULTURAL)

Water Dispersible Granule for selective weed control

GUARANTEE:
Pyroxasulfone……………………..……..85.00%

REGISTRATION NO. 30572
PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

POTENTIAL SKIN SENSITIZER
KEEP OUT OF REACH OF CHILDREN

Warning: contains the allergen, sulfites.

NET CONTENTS: 6.5 L

US Registrant/Public Inquires Contact:
K-I Chemical U.S.A. Inc.
11 Martine Avenue
Suite 970
White Plains, NY 10606
1-914-682-8934
1. GENERAL INFORMATION

Pyroxasulfone 85 WG is a selective preemergence herbicide for controlling annual grasses and annual broadleaf weeds in field corn. FOR OUTDOOR USE ONLY.

2. 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 Product 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.

3. PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

Potential skin sensitizer. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Apply only when the potential for drift to areas of human habitation or 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 apply by air.

Food Residue

If this pest control product is to be used on a commodity that may be export to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada’s web site at www.croplife.ca.
Personal Protective Equipment (PPE)

Follow mixer/loader and applicator scenario, as appropriate in the chart below.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Amount of product handled per day</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mixer/Loader/Cleanup and Repair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Applicator</td>
</tr>
<tr>
<td>Groundboom</td>
<td>41 kg or less</td>
<td>Long-sleeved shirt and long pants, shoes plus socks and chemical-resistant gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long-sleeved shirt and long pants, shoes plus socks Apply in an open or closed cab tractor.*</td>
</tr>
<tr>
<td></td>
<td>More than 41 kg</td>
<td>Chemical-resistant coveralls over a long-sleeved shirt and long pants, chemical-resistant footwear, plus socks and chemical-resistant gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coveralls over long-sleeved shirt and long pants, shoes plus socks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apply in a closed cab tractor.*</td>
</tr>
</tbody>
</table>

* A closed cab is a chemical resistant barrier that completely surrounds the occupant of the cab and prevents contact with the pesticide or treated surfaces outside the cab.

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Reentry Restrictions

**Do not** enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.
4. FIRST AID

If Swallowed
Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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 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.

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

5. TOXICOLOGICAL INFORMATION

Treat symptomatically.

6. ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms and 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.

7. STORAGE

Store in original container in cool, dry, well-ventilated location. To prevent contamination store this product away from food or feed.

8. DISPOSAL AND DECONTAMINATION

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

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 rinsing 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 provincial requirements.

9. DIRECTION 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.
**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) medium classification. Boom height must be 60 cm or less above the crop or ground.

**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 shrublands), 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 Habitat of Depths:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less than 1 m</td>
</tr>
<tr>
<td>Field sprayer</td>
<td>Field Corn</td>
<td>5</td>
</tr>
</tbody>
</table>

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.

**WEED CONTROLLED**

**Pyroxasulfone 85 WG** alone will control the following weeds.
- Barnyardgrass
- Crabgrass large
- Foxtail (green, yellow, giant)
- Ryegrass (Italian)
- Common waterhemp
- Redroot pigweed
Moisture is necessary to activate the active ingredient pyroxasulfone in soil for weed control. Dry weather following applications of **Pyroxasulfone 85 WG** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **Pyroxasulfone 85 WG** will control susceptible germinating weeds. **Pyroxasulfone 85 WG** may not control weeds that germinate after application but before an activating rainfall / irrigation, or weeds that germinate through cracks resulting from dry soil. When adequate moisture is not received after **Pyroxasulfone 85 WG** application, weed control may be improved by irrigation.

**Do not** use flood irrigation to activate or incorporate **Pyroxasulfone 85 WG**.

Applications to crops under stress due to either inadequate or excess of moisture for normal crop development, cool and hot temperatures, sodic soils, poorly drained soils, hail damage, flooding, pesticide injury, mechanical injury or widely fluctuating temperatures may result in crop injury.

**APPLICATION INFORMATION**

**Do not** use on peat or muck soils and soils with 7% or more organic matter content.  
**Do not** apply by air.  
**Do not** apply this product without dilution in a spray carrier.  
**Do not** apply through any type of irrigation system.  
**Do not** contaminate irrigation ditches or water used for domestic purposes.  
**Do not** apply **Pyroxasulfone 85 WG** or **Pyroxasulfone 85 WG** tank mixtures when environmental conditions may result in drift to non- target sites.

Drift of this product may be harmful to non-target plants near the treatment area.  
**Do not** apply during periods of gusty winds.

**HOST CROP**

Field corn.

**Preplant Surface Applications:** Apply Pyroxasulfone 85 WG alone up to 30 days before planting.

**Preemergence Surface Applications:** After planting and before crop emergence, apply a uniform broadcast treatment to the soil surface.
Early Postemergence Applications: Pyroxasulfone 85 WG must be applied and activated prior to weed seedling emergence or in a tank mixture that controls the emerged weeds. Refer to Crop-Specific Information for specific postemergence application recommendations by crop.

**MIXING AND SPRAYING INSTRUCTIONS**

- Spray Pressure 200-300 kPa
- Spray Volume minimum 100 litres per hectare.
- Keep bypass line on or near bottom of tank to minimize forming.

Pyroxasulfone 85 WG can be mixed with one or more herbicide products, provided that the tank mix product labels do not prohibit such mixing. Follow the most restrictive label for all products used. Refer to the Crop-Specific Information section to determine which tank mix products can be applied to specific crops. Physical incompatibility, reduced weed control, or crop injury may result from mixing Pyroxasulfone 85 WG with other pesticides, additives, or fertilizers.

**Compatibility Test for Tank Mix Products**
Always perform a compatibility jar test before tank mixing products.

Use 3.3 cups (800 ml) of water for 200 litres per hectare spray volume. Adjust rates accordingly for other spray volumes. Water from the intended source at the source temperature should only be used.

Add the tank mix products in the sequence indicated in the Mixing Order. Use 2 teaspoons (10 ml) for each kilogram or 1 teaspoon (5 ml) for each litre of label rate per hectare.

After each tank mix product addition, cap the jar and invert 10 cycles.

Once all of the tank mix products have been added to the jar, let the solution stand for 15 minutes. Observe the uniformity and stability of the solution. The solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, and should have a smooth texture. If the solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the
compatibility agent as directed on its label. If the solution is still incompatible, **DO not** mix the products in the same tank.

**Mixing Order**

1. **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.

2. **Agitation.** Maintain constant agitation throughout mixing and application.

3. **Inductor.** If an inductor is used, rinse it thoroughly after each component has been added.

4. **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.

5. **Water-dispersible products.** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions). Add **Pyroxasulfone 85 WG** at this point in the mixing process.

6. **Water-soluble products.**

7. **Emulsifiable concentrates.**

8. **Water-soluble additives.** (such as ammonium sulfate or urea ammonium nitrate when applicable).

9. **Remaining quantity of water.**

Maintain constant agitation during application.

**CLEANING SPRAY EQUIPMENT**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer’s directions. Triple rinse the equipment before and after applying **Pyroxasulfone 85 WG**.

**SOIL TEXTURE**

Unless a specific soil texture is mentioned, rate tables throughout this label refer to Table 1 for soil texture groups: coarse, medium, medium-fine and fine. Table 1 includes a complete listing of soil textures included in each of the soil texture groupings.
Table 1. Soil Textures

<table>
<thead>
<tr>
<th>Coarse</th>
<th>Medium</th>
<th>Medium-Fine</th>
<th>Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>Loam</td>
<td>Sandy clay loam</td>
<td>Silty clay</td>
</tr>
<tr>
<td>Loamy sand</td>
<td>Silt loam</td>
<td>Sandy clay</td>
<td>Clay loam</td>
</tr>
<tr>
<td>Sandy loam</td>
<td>Silt</td>
<td>Silty clay loam</td>
<td>Clay</td>
</tr>
</tbody>
</table>

FIELD CORN

Pyroxasulfone 85 WG can be used as a preplant surface, preemergence or early postemergence treatment on corn up to V4 stage (visible 4th leaf collar). Before applying to corn, verification of Pyroxasulfone 85 WG selectivity on your hybrid line must be confirmed with your local seed company or supplier to avoid potential injury to sensitive hybrids. Crop seeds must be planted a minimum 2.5 cm deep.

Crop Specific Restrictions and Limitation

<table>
<thead>
<tr>
<th>Application method and timing</th>
<th>Rate per hectare Pyroxasulfone 85 WG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coarse</td>
</tr>
<tr>
<td>Pre-plant surface (up to 30 days before planting) and pre-emergence surface</td>
<td>145 g</td>
</tr>
<tr>
<td></td>
<td>Tank-mix:</td>
</tr>
<tr>
<td></td>
<td>Aatrex Liquid 480 at 2.1-3.1 L</td>
</tr>
<tr>
<td></td>
<td>Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.</td>
</tr>
<tr>
<td>Post-emergence: prior to weed emergence and up to 4-leaf stage of corn</td>
<td>145 g</td>
</tr>
<tr>
<td></td>
<td>Tank-mix:</td>
</tr>
<tr>
<td></td>
<td>Aatrex Liquid 480 at 2.1-3.1 L</td>
</tr>
</tbody>
</table>

When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, 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.
CROP ROTATIONAL RESTRICTION

If any crop treated with Pyroxsulfone 85 WG is lost, only field corn can be replanted immediately. Do not make a second application of Pyroxsulfone 85 WG. Fields treated with Pyroxsulfone 85 WG can be seeded to field corn the following year. Conduct a field bioassay (a test strip grown to maturity) to confirm crop safety prior to seeding any rotational crops other than field corn.

RESISTANT MANAGEMENT

For resistance management Pyroxsulfone 85 WG contains a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to Pyroxsulfone 85 WG and other Group 15 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 Pyroxsulfone 85 WG or other Group 15 herbicides with different herbicide groups that control the same weeds in the 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 K-I Chemical U.S.A. Inc. at 1-914-682-8934.

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