Pyroxasulfone 85 WG Herbicide

For weed control in field corn and soybeans.
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 BOOK-LET BEFORE USING

POTENTIAL SKIN SENSITIZER
KEEP OUT OF REACH OF CHILDREN
Warning: contains the allergen, sulfites.

Net Contents: 2 Kilograms

US Registrant/Public Inquires Contact:
K-I Chemical U.S.A. Inc.
11 Martine Avenue
Suite 1460
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 and soybeans. 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.
Application is limited to agricultural crops only when there is low risk of drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas, taking 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 exported 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>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>More than 41 kg</td>
<td>Chemical-resistant overalls over a long-sleeved shirt and long pants, chemical-resistant footwear, plus socks and chemical-resistant gloves</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 manufacturer or the provincial regulatory agency. Contact the manufacturer 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 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 Soybean</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.

10. WEED CONTROLLED
Pyroxasulfone 85 WG alone will control the following weeds.
Barleygrass 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.

11. 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 mixes 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
Preplant Surface Applications: Corn and Soybeans
Apply Pyroxasulfone 85 WG alone up to 30 days before planting.
Preemergence Surface Applications: Corn and Soybeans
After planting and before crop emergence, apply a uniform broadcast treatment to the soil surface.
Early Postemergence Applications: Corn ONLY
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.

12. 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 foaming.
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 mixed. 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 800 ml (3.3 cups) 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 10 ml (2 teaspoons) for each kilogram or 5 ml (1 teaspoon) for each litre of label rate per hectare.
For each tank mix product addition, cap the mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.
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.
tion is still incompatible, DO not mix the products in the same tank.

Mixing Order
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.
7. Emulsifiable concentrates.
8. Water-soluble additives. (Such as ammonium sulfate or urea ammonium nitrate when applicable).

13. 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.

14. 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>
<thead>
<tr>
<th>Soil Textures</th>
<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>
<td></td>
</tr>
<tr>
<td>Loamy sand</td>
<td>Silt loam</td>
<td>Sandy clay</td>
<td>Clay loam</td>
<td></td>
</tr>
<tr>
<td>Sandy loam</td>
<td>Silt</td>
<td>Silty clay loam</td>
<td>Clay</td>
<td></td>
</tr>
</tbody>
</table>

15. FIELD CORN
Pyroxasulfone 85 WG can be used as a preplant surface, preemergence or early post-emergence treatment on field corn up to V4 stage (visible 4th leaf collar). Before applying to corn, verification of Pyroxasulfone 85 WG selectivity on your hybrids must be confirm 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 by soil texture</th>
<th>Coarse</th>
<th>Medium to Medium fine</th>
<th>Fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-plant surface (up to 30 days before planting) and pre-emergence surface</td>
<td>145 g</td>
<td>195 g</td>
<td>245 g</td>
<td>290 g</td>
</tr>
<tr>
<td>Tank-mix: Atrex Liquid 480 at 2.1-3.1 L</td>
<td>Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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</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.

17. CROP ROTATIONAL RESTRICTION
If any crop treated with Pyroxasulfone 85 WG is lost, only field corn and soybean can be replanted immediately. Do not make a second application of Pyroxasulfone 85 WG.

Fields treated with Pyroxasulfone 85 WG can be seeded to field corn and soybean 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 and soybean.

18. RESISTANT MANAGEMENT
For resistance management Pyroxasulfone 85 WG contains a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to Pyroxasulfone 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 Pyroxasulfone 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 mode of action 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 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 and filling equipment and plant cleaning 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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