2024-06-17
2023-5573
CONTAINER LABEL

GROUP HERBICIDE

Pyroxasulfone 85 WG

Herbicide

For weed control in bulb onion, celery, chickpeas, edamame, field corn, field peas, flax, leek, lentil, mint, peanuts, potato, safflower, seed corn, soybean, sunflower and wheat (spring and winter).

COMMERCIAL (AGRICULTURAL)

Wettable Granule for selective weed control

ACTIVE INGREDIENT:
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: 1 – 1000 KG

US Registrant/Public Inquiries Contact:
K-I Chemical U.S.A. Inc.
5425 Page Road, Suite 160
Durham, NC 27703
1-914-682-8934

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.

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 to agricultural crops when the potential for drift to areas of human habitation and 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.

DO NOT apply by air.

Personal Protective Equipment (PPE)

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

<table>
<tr><th rowspan="2">Equipment</th><th rowspan="2">Amount of product handled per day</th><th colspan="2">Personal Protective Equipment</th></tr>
<tr><th>Mixer/Loader/Clean-up and Repair</th><th>Applicator</th></tr>
<tr><td rowspan="2">Groundboom</td><td>70 kg or less</td><td colspan="2">Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. In addition, wear a NIOSH-approved N95 (minimum) filtering respirator (dusk mask) that is properly fit tested when handling. Gloves are not required during application within a closed cab.</td></tr>
<tr><td>More than 70 kg</td><td>Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, and chemical-resistant footwear. In addition, wear a NIOSH-approved N95 (minimum) filtering respirator (dusk mask) that is properly fit tested when handling.</td><td>Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Gloves are not required during application within a closed cab.</td></tr>
</table>

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.

Re-entry Restrictions

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours, except for hand weeding in bulb onion and leek where a restricted-entry interval of 5 days is required.

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.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

ENVIRONMENTAL PRECAUTIONS

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

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

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacture or the provincial/ territorial regulatory agency. Contact the manufacture and the provincial/ territorial 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/ territorial requirements.

BOOKLET LABEL

GROUP	HERBICIDE

Pyroxasulfone 85 WG

Herbicide

For weed control in bulb onion, celery, chickpeas, edamame, field corn, field peas, flax, leek, lentil, mint, peanuts, potato, safflower, seed corn, soybean, sunflower and wheat (spring and winter).

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1. GENERAL INFORMATION

Pyroxasulfone 85 WG is a selective pre-plant/pre-emergence herbicide for controlling annual grasses and annual broadleaf weeds in chickpeas, edamame, field corn, field peas, flax, lentil, potato, safflower, seed corn, soybean, sunflower, wheat (spring and winter). FOR OUTDOOR USE ONLY. **Pyroxasulfone 85 WG** can also be applied for controlling annual grasses and annual broadleaf weeds, in bulb onion at post-emergence from two true leaf stage to six true leaf stage, in field corn at early post-emergence up to the 4-leaf stage, in transplanted leek at pre/post-transplanting up to third leaf stage, in celery post-transplant up to 15 days post transplanting, in mint at dormant stage, and in peanut at early post-emergence, “cracking stage” to first leaf stage through pod development stage.

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.

3. PRCAUTIONS

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 to agricultural crops when the potential for drift to areas of human habitation and 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.

DO NOT apply by air.

Personal Protective Equipment (PPE)

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

Equipment	Amount of product handled per day	Personal Protective Equipment	
		Mixer/Loader/Clean-up and Repair	Applicator
Groundboom	70 kg or less	Long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. In addition, wear a NIOSH-approved N95 (minimum) filtering respirator (dusk mask) that is properly fit tested when handling. Gloves are not required during application within a closed cab.	
	More than 70 kg	Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks, and chemical-resistant footwear. In addition, wear a NIOSH-approved N95 (minimum) filtering respirator (dusk mask) that is properly fit tested when handling.	Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes. Gloves are not required during application within a closed 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.

Re-entry Restrictions

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval of 12 hours, except for hand weeding in bulb onion and leek where a restricted-entry interval of 5 days is required.

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.

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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.

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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 PRECAUTIONS

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

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.

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

For information on disposal of unused, unwanted product, contact the manufacture or the provincial/ territorial regulatory agency. Contact the manufacture and the provincial/ territorial 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/ territorial requirements.

9. DIRECTIONS 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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

Spray Buffer zones:

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label.

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

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of:		
		Freshwater Habitat of Depths:		Terrestrial habitat
		Less than 1 m	Greater than 1 m	
Field sprayer	Bulb onion, Celery, Chickpeas, Edamame, Field corn, Field Peas, Flax, Leek, Lentil, Mint, Peanuts, Potato, Safflower, Seed corn, Soybeans, Sunflower and Wheat (spring and winter),	5	3	1

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.

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.

WEEDS CONTROLLED

Pyroxasulfone 85 WG alone at a rate of 117 – 290 g/ha will provide pre-emergent control of the following weeds (refer to Crop Specific Restrictions and Limitations for details):

<u>Annual grasses</u>
Barnyard grass
Crabgrass (large)
Downy brome
Foxtail (green, yellow, giant)
Japanese brome
Ryegrass (Italian)
Wild oats (suppression)

<u>Annual Broadleaf Weeds</u>
Common waterhemp
Lamb's quarters (suppression)
Redroot pigweed
Stinkweed
Cleavers
Hairy nightshade
Velvetleaf
Kochia (suppression)
Wild Buckwheat (suppression)

Lower application rates which **DO NOT** meet the soil type for each crop may result in reduced consistency and duration of weed control. Refer to crop specific use directions for soil type information and for specific related use rates.

Relatively lower application rates for wheat may result in reduced consistency and duration of weed control.

Application of Pyroxasulfone 85 WG to celery on muck and peaty muck soils (greater than 20% organic matter) may result in reduced consistency and duration of weed control.

Pyroxasulfone 85 WG alone at a rate of 70.5 – 139 g/ha will provide early season residual suppression of the following weeds (refer to Crop Specific Restrictions and Limitations for details):

Annual grasses
Foxtail (green and yellow)
Wild oats

Annual Broadleaf Weeds
Common waterhemp
Kochia
Lamb's-quarters
Redroot pigweed

Pyroxasulfone 85 WG alone at a rate of 176 g/ha will provide pre-emergent control of the following weeds in muck soil (refer to Crop Specific Restrictions and Limitations for details):

Annual grasses
Barnyard grass
Foxtail (green, yellow, and giant)

Annual Broadleaf Weeds
Common groundsel
Common purslane
Green amaranth
Lamb's-quarters (suppression)
Redroot pigweed
Yellowcress

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.

10. APPLICATION INFORMATION

DO NOT use on peat or muck soils and soils with 7% or more organic matter content unless specific crop use section directs otherwise.
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.
DO NOT apply during periods of gusty winds.
Drift of this product may be harmful to non-target plants near the treatment area.

HOST CROP

Pre-plant Applications:
Chickpeas, Edamame, Field Corn, Field Peas, Flax, Lentil, Seed Corn, Soybean and Wheat (spring and winter).
Apply a uniform treatment of **Pyroxasulfone 85 WG** to the soil surface any time before planting. **Pyroxasulfone 85 WG** must be applied and activated prior to weed seedling emergence or in a tank mixture that controls the emerged weeds such as glyphosate. Refer to Crop-Specific Information for specific pre-plant (safflower, seed corn, sunflower) application recommendations by crop.

Pre-emergence Applications:
Chickpeas, Edamame, Field Corn, Field Peas, Flax, Lentil, Potato, Safflower, Seed Corn, Soybean Sunflower, and Wheat (spring and winter).
After planting and before crop emergence, apply a uniform treatment of **Pyroxasulfone 85 WG** to the soil surface. **Pyroxasulfone 85 WG** must be applied and activated prior to weed seedling emergence or in a tank mixture that control the emerged weeds such as glyphosate.

Early Post-transplant, Mid Post-transplant, Pre-transplant or Post-transplant Applications:

Celery and Leek (transplanted)	**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 application timing recommendations by crop.

Early Post-emergence or Post-emergence Applications:

Bulb onion (seeded)	**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 application timing recommendations by crop.
Field Corn & Peanuts	

Dormant Stage Applications:

Mint 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 application timing recommendations by crop.

11. MIXING AND SPRAYING INSTRUCTIONS

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 pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact K-I Chemical U.S.A. Inc. at 1-914-682-8934 for information before applying any tank mix that is not specifically recommended on this label.

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

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.

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.

12. 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**.

13. SOIL TEXTURE

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

Coarse	Medium	Medium-Fine	Fine
Sand	Loam	Sandy clay loam	Silty clay
Loamy sand	Silt loam	Sandy clay	Clay loam
Sandy loam	Silt	Silty clay loam	Clay

14. BULB ONION (seeded)

Pyroxasulfone 85 WG can be applied to direct seeded bulb onion as a foliar post-emergence application from the 2 to 6 leaf stage for pre-emergent control or early season residual suppression of weeds listed in WEEDS CONTROLLED section. **Pyroxasulfone 85WG** may be used as part of a weed control program in seeded bulb onion either in combination or sequentially with other herbicides for a broader spectrum of weed control and/or control of emerged weeds. Before applying to seeded bulb onion, verification of varietal tolerance must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall or extended periods of water-saturated soil occur during bulb onion (seeded) germination or early seedling development. However, this will not result in reduced bulb onion yield.

Crop Specific Restrictions and Limitations
DO NOT exceed one application per year.
DO NOT apply **Pyroxasulfone 85WG** in a soil classified as a Sand.

The pre harvest interval after an application of **Pyroxasulfone 85WG** is 60 days.

For early season residual weed suppression

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture
	Mineral Soil (all soil textures)
Postemergence: from the 2 to 6 leaf stage.	88 g

For pre-emergent weed control

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture	
	Mineral soil (Coarse, Medium & Fine)	Muck soil
Postemergence: from the 2 to 6 leaf stage.	176 g	

15. CELERY

Pyroxasulfone 85 WG can be applied as an early post-transplant (1 to 6 days after transplanting) or as a mid post-transplant application (7 to 15 days after transplanting) to transplanted celery in Muck or Peaty Muck soil (greater than 20% organic matter) for residual control of weed species listed below.

<u>Annual grasses</u>
Barnyardgrass
Crabgrass (large)
Foxtail (green, yellow, giant)

<u>Annual Broadleaf Weeds</u>
Redroot pigweed
Lamb's quarters (suppression)

Before applying to celery, verification of **Pyroxasulfone 85 WG** selectivity on celery varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Apply **Pyroxasulfone 85WG** only to a uniform transplant bed which is firm and free of clods and cracks. The transplant bed must be prepared to ensure good transplant row closure.

The use of **Pyroxasulfone 85 WG** may result in growth suppression and/or injury or stand thinning of celery if extreme conditions of high rainfall and/or extended periods of water-saturated soil occur during early transplant growth and development.

Crop Specific Restrictions and Limitation
Do not apply **Pyroxasulfone 85WG** as a mid post-transplant application less than 60 days before harvest.
Do not make more than one application per season.
Do not apply **Pyroxasulfone 85WG** to celery other than in Muck or Peaty Muck soil (greater than 20% organic matter).
Pyroxasulfone 85WG must be applied and activated prior to weed seedling emergence or in a tank mixture that control the emerged weeds.

Application method or timing	Soil Type	Rate per hectare Pyroxasulfone 85 WG
Early Post-transplant (1 to 6 days after transplant) or Mid Post-transplant (7 to 15 days after transplant)	Muck or Peaty Muck soil (Greater than 20% organic matter)	240 g

16.CHICKPEAS, FIELD PEAS, FLAX AND LENTIL

Pyroxasulfone 85 WG can be applied pre-plant surface or pre-emergence treatment on chickpeas, field peas, flax and lentil. Before applying, verification of **Pyroxasulfone 85 WG** selectivity on crop varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Crop seeds must be planted a minimum 2.5 cm deep. **DO NOT** apply **Pyroxasulfone 85 WG** if crop plants have emerged.

The use of **Pyroxasulfone 85 WG** may result in growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during crop germination or early seedling development.

Crop Specific Restrictions and Limitations
DO NOT apply to Dried Beans.
DO NOT make more than one application per season.

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-plant surface or pre-emergence surface	117 - 147g	147-175 g	175-245 g	245 g
	Tank-mix: Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.			

The lower rates in the rate range of **Pyroxasulfone 85 WG** may be employed as a pre-plant surface or pre-emergence surface set-up treatment - an application to remove early weed competition to allow good crop establishment. The lower rates generally **DO NOT** provide residual control as long as the higher rates. An in-crop application of herbicide may be required subsequently to control emerged weeds.

17.EDAMAME

Pyroxasulfone 85 WG can be applied as a pre-plant surface or pre-emergence treatment to edamame. Before applying to edamame, verification of **Pyroxasulfone 85 WG** selectivity on edamame varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Crop seeds must be planted a minimum 4 cm deep. **Do not** apply **Pyroxasulfone 85 WG** if edamame has emerged.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during edamame germination or early seedling development. These suppressions have not resulted in reduced edamame yield potential.

Crop Specific Restrictions and Limitation

Application method or timing	Rate per hectare Pyroxasulfone 85 WG by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-plant surface or Pre-emergence surface	147 g	195 g	245 g	285 g
	Tank-mix: Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.			

18. FIELD CORN

Pyroxasulfone 85 WG can be used as a pre-plant surface, pre-emergence or early postemergence 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 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 Limitations

<table>
<tr><td rowspan="3">Application method and timing</td><td colspan="4">Rate per hectare Pyroxasulfone 85 WG by soil texture</td></tr>
<tr><td rowspan="2">Coarse</td><td colspan="2">Medium to Medium fine</td><td rowspan="2">Fine</td></tr>
<tr><td>OM ≤ 3%</td><td>3% < OM < 7%</td></tr>
<tr><td rowspan="2">Pre-plant surface or preemergence surface</td><td>147 g</td><td>195 g</td><td>245 g</td><td>290 g</td></tr>
<tr><td colspan="4">Tank-mix:
Aatrex Liquid 480 at 2.1-3.1 L
Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.</td></tr>
<tr><td rowspan="2">Postemergence: prior to weed emergence and up to 4-leaf stage of corn</td><td>147 g</td><td>195 g</td><td>245 g</td><td>290 g</td></tr>
<tr><td colspan="4">Tank-mix:
Aatrex Liquid 480 at 2.1-3.1 L</td></tr>
</table>

19. LEEK (transplanted)

Pyroxasulfone 85 WG can be applied to transplanted leek as a pre-transplant or post-transplant application for pre-emergent control or early season residual suppression of weeds listed in the WEEDS CONTROLLED section.

Pyroxasulfone 85WG may be used as part of a weed control program in transplanted leek either in combination or sequentially with other herbicides for a broader spectrum of weed control and/or control of emerged weeds. Before applying to transplanted leek, verification of varietal tolerance must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall or extended periods of water-saturated soil occur. However, this will not result in reduced leek yield.

Crop Specific Restrictions and Limitations
DO NOT exceed one application per year.
DO NOT apply **Pyroxasulfone 85WG** in a soil classified as a Sand.
The pre harvest interval after an application of **Pyroxasulfone 85WG** is 60 days.

For early season residual weed suppression

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture
	Mineral soil (all soil textures)
Pre- and post-transplant (up to the 3 leaf stage) applications	88 g

For pre-emergent weed control

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture	
	Mineral (Coarse, Medium and Fine)	Muck
Pre- and post-transplant (up to the 3 leaf stage) applications	176 g	

20. MINT (peppermint and spearmint – Dormant Season Application) – Prairie Provinces only

Pyroxasulfone 85 WG can be applied as a dormant application to mint (peppermint and spearmint tops) in the early spring prior to active green growth for early season residual suppression of weeds listed in the WEEDS CONTROLLED section. Before applying to mint, verification of varietal tolerance must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. **DO NOT** apply **Pyroxasulfone 85 WG** if mint has broken dormancy (new growth emerging).

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall or extended periods of water-saturated soil occur during mint germination or early seedling development. However, this will not result in reduced mint fresh and oil yields.

Crop Specific Restrictions and Limitations
DO NOT apply if roots and rhizomes of mint are weak, thinned or damaged.
DO NOT use roots from **Pyroxasulfone 85 WG** treated plants for human consumption. Roots treated with **Pyroxasulfone 85 WG** can be used for root propagation.
DO NOT apply **Pyroxasulfone 85 WG** to newly planted mint
DO NOT use **Pyroxasulfone 85 WG** between cuttings of mint
DO NOT apply **Pyroxasulfone 85 WG** to mint that has broken dormancy. Application to mint that is near dormancy break can result in crop injury. Risk of crop injury increases the closer application is to mint dormancy break.
DO NOT apply to soils that are classified as a “sand”.
Apply only to stands that in the previous year were healthy and vigorous.

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture
	All soil textures
A single application at the dormant physiological stage	105 g
	Apply **Pyroxasulfone 85 WG** alone or in a tank mix combination with another dormant use herbicide, or as a dormant application.

21.PEANUTS ON MINERAL SOIL

Pyroxasulfone 85 WG can be applied as an early postemergence (“at cracking” stage to first leaf stage through beginning of pod development stage) to peanuts grown on mineral soil for early season residual suppression of weeds listed in the WEEDS CONTROLLED section.

Before applying to peanuts, verification of **Pyroxasulfone 85 WG** selectivity on peanuts varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties.

Pyroxasulfone 85 WG must be applied and activated prior to weed seedling emergence. Weeds that are already emerged at the time of application must be controlled with cultivation, or sequential application of another herbicide labelled for postemergence control of the target weeds in peanut.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during peanuts germination or early seedling development.

Crop Specific Restrictions and Limitation

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture
	All soil types
Early post-emergence (“at cracking” stage to first leaf stage through pod development stage)	70.5 - 139* g
	Maximum 1 application per year. **Feeding/Grazing Restriction: DO NOT** graze or feed treated hay to livestock. *use the higher rate in the listed rate range for longer residual and under heavier weed populations

22. POTATO

Pyroxasulfone 85 WG can be applied as a preemergence treatment to potato after planting or immediately following drag-off or hilling, but before potato and weed emerge. Before applying to potato, verification of **Pyroxasulfone 85 WG** selectivity on potato varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Crop seeds must be planted a minimum 5 cm deep.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during potato germination or early seedling development. These suppressions have not resulted in reduced potato yield potential.

Crop Specific Restrictions and Limitations

- **DO NOT** apply **Pyroxasulfone 85 WG** prior to planting potato seed pieces.
- **DO NOT** apply **Pyroxasulfone 85 WG** if potato has emerged.
- **DO NOT** apply **Pyroxasulfone 85 WG** in soils classified as a Sand.
- Where “drag off” or “hilling” is practiced, **DO NOT** apply **Pyroxasulfone 85 WG** until the process is complete and there should be 5 cm of soil covering the vegetative portion of the potato plant.

Application method and timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-emergence surface	147 g	195 g	245 g	290 g

23. SAFFLOWER

Pyroxasulfone 85 WG can be applied preplant surface or preemergence treatment on safflower. Before applying to safflower, verification of **Pyroxasulfone 85 WG** selectivity on safflower varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Crop seeds must be planted a minimum 4 cm deep. **DO NOT** apply **Pyroxasulfone 85 WG** if safflower has emerged.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during safflower germination or early seedling development. These suppressions have not resulted in reduced safflower yield potential.

Crop Specific Restrictions and Limitations

DO NOT make more than one application per season.

Application method and timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-plant surface (0 to 30 days before planting) or pre-emergence surface	147 g	195 g	245 g	290g

24. SEED CORN

Pyroxasulfone 85 WG can be applied as a pre-plant surface or pre-emergence treatment to seed corn. Crop seeds must be planted a minimum 2.5 cm deep.

Pyroxasulfone 85 WG applied as directed will provide the control of the following weeds:.

ANNUAL GRASSES	ANNUAL BROADLEAF WEEDS
Barnyard grass	Common waterhemp
Crabgrass (large)	Redroot pigweed
Foxtail (green and yellow)	
Ryegrass (Italian)	

Before applying to seed corn, verification of **Pyroxasulfone 85 WG** selectivity on seed corn varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. **Do not** apply **Pyroxasulfone 85 WG** if seed corn has emerged.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during seed corn germination or early seedling development.

Pyroxasulfone 85 WG must be applied and activated prior to weed seedling emergence. Weeds germinated at time of treatment will not be controlled and a postemergent herbicide will be needed to control germinated weeds.

Crop Specific Restrictions and Limitation
DO NOT make more than one application per season.

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium- Fine soil		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-plant surface (up to 30 days before planting) or pre-emergence	147 g	195 g	245 g	290 g

Early season residual suppression

Pyroxasulfone 85 WG applied as directed will provide the early season residual suppression of the following weeds, when an in-crop application of another registered herbicide is planned.

ANNUAL GRASSES	ANNUAL BROADLEAF WEEDS
Foxtail (green and yellow)	Common waterhemp
Kochia	Lamb's quarters
Wild Oat	Redroot pigweed

Crop Specific Restrictions and Limitation

DO NOT make more than one application per season.

Application method or timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture
	All soil types
Pre-plant (up to 30 days before planting) or pre-emergence	70.5 - 139 g
	Use the higher rate in the above listed rate range for longer residual and under heavier weed populations.

25. SOYBEANS

Pyroxasulfone 85 WG can be applied pre-plant surface or pre-emergence treatment on soybeans. Before applying to soybean, verification of **Pyroxasulfone 85 WG** selectivity on soybean varieties must be confirmed with your local seed company or supplier to avoid potential injury to sensitive varieties. Crop seeds must be planted a minimum 4 cm deep. **DO NOT** apply **Pyroxasulfone 85 WG** if soybeans have emerged.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during soybean germination or early seedling development. These suppressions have not resulted in reduced soybean yield potential.

Crop Specific Restrictions and Limitations

Application method and timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Preplant surface or preemergence surface	147 g	195 g	245 g	290 g
	Tank-mix: Glyphosate product (isopropylamine, potassium, or diammonium salt). Refer to glyphosate label for weed species controlled and required application rates.			

26. SUNFLOWER

Pyroxasulfone 85 WG may be applied preplant surface or preemergence to sunflower for residual preemergence weed control. **Pyroxasulfone 85 WG** may also be applied to varieties that are tolerant of one or more Imidazolinone and/or sulfonylurea herbicides. Before applying to seed sunflower verify with your local seed company (supplier) the selectivity of **Pyroxasulfone 85 WG** on your inbred line or hybrid to avoid potential injury. **DO NOT** apply **Pyroxasulfone 85 WG** if sunflowers have emerged.

The use of **Pyroxasulfone 85 WG** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during sunflower germination or early seedling development. These suppressions have not resulted in reduced sunflower yield potential.

Crop Specific Restrictions and Limitations
DO NOT make more than one application per season.

Application method and timing	Rate per hectare **Pyroxasulfone 85 WG** by soil texture			
	Coarse	Medium to Medium fine		Fine
		OM ≤ 3%	3% < OM < 7%	
Pre-plant surface (0 to 30 days before planting) or pre-emergence surface	147 g	195 g	245 g	290 g

27. WHEAT (spring and winter)

Pyroxasulfone 85 WG can be applied pre-plant or pre-emergence to wheat for weed control in fall (winter wheat) or spring (spring wheat). **Pyroxasulfone 85 WG** should be applied to uniform seedbed which is firm and free of clods, and wheat seed must be covered by soil. Before applying to wheat, verification of **Pyroxasulfone 85 WG** selectivity on wheat varieties must be confirmed with your local seed company or supplier to avoid potential injury or yield losses to sensitive varieties. Crop seeds must be planted a minimum of 2.5 cm deep.

Weed control may be reduced if trash from the previous crop covered more than 25% on the ground at **Pyroxasulfone 85 WG** application.

Pyroxasulfone 85 WG may result in wheat injury, but final grain yield should not be negatively impacted.

Crop Specific Restrictions and Limitations
DO NOT apply to durum wheat.
DO NOT make more than one application per season.
DO NOT allow livestock to graze on wheat or wheat forage, hay, or straw less than 42 days after the application.

<table>
<tr><th rowspan="2">Application method and timing</th><td colspan="2">Rate per hectare Pyroxasulfone 85 WG by soil texture</td></tr>
<tr><td>Coarse - Medium</td><td>Medium-Fine - Fine</td></tr>
<tr><td rowspan="2">Pre-plant</td><td>147 g/ha</td><td>177 g/ha</td></tr>
<tr><td colspan="2">Tank-mix with glyphosate at labeled rates</td></tr>
<tr><td rowspan="2">Pre-emergence</td><td>147 g/ha</td><td>177 g/ha</td></tr>
<tr><td colspan="2">Tank-mix with glyphosate at labeled rates</td></tr>
</table>

28. CROP ROTATIONAL RESTRICTION

If any crop treated with **Pyroxasulfone 85 WG** is lost, only labelled crops can be replanted immediately. Do not make a second application of **Pyroxasulfone 85 WG**. Fields treated with **Pyroxasulfone 85 WG** can be seeded to bulb onion, chickpea, edamame, field corn, field peas, flax, leek, lentil, mint, potato, spring wheat, or soybean the following year and winter wheat with a four-month re-cropping interval and can be transplanted to celery the following year. Conduct a field bioassay (a test strip grown to maturity) to confirm crop safety prior to seeding or transplanting any rotational crops other than crops mentioned in this section.

29. RESISTANCE MANAGEMENT

For resistance management **Pyroxasulfone 85 WG** is 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 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 K-I Chemical U.S.A. Inc. at 1-914-682-8934.