

GROUP	5	HERBICIDE
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PYRAMIN® FL

LIQUID SUSPENSION HERBICIDE

For weed control in sugar beet and red table beets only

COMMERCIAL (AGRICULTURAL)

GUARANTEE: Pyrazon*.....430 g/L

*ISO common name: Chloridazon

Contains 1,2-benzisothiazolin-3-one and 2-methyl-4-isothiazolin-3-one, each at 0.004%, as preservatives

Warning, contains the allergen soy

REGISTRATION NO.: 15857

PEST CONTROL PRODUCTS ACT

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT
1-800-454-2673**



CAUTION

POISON

NET CONTENTS: 3 L

READ THE LABEL AND BOOKLET BEFORE USING.
KEEP OUT OF REACH OF CHILDREN
SHAKE CONTAINER WELL BEFORE USING

BASF Canada Inc.
100 Milverton Drive
5th Floor
Mississauga, Ontario
L5R 4H1
1-877-371-2273

PYRAMIN® FL is a registered trademark of BASF.

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Do not take internally.
3. May cause irritation of eyes, nose, throat and skin. Avoid inhalation of vapour, dust, or spray mist and avoid contact with eyes, skin or clothing.
4. Wash thoroughly after handling and before eating, drinking or smoking.
5. Wear protective equipment and clothing, including goggles or face shield, gloves (rubber, PVC, neoprene or nitrile), hat, long-sleeved shirt, trousers and rubber boots.
6. If clothing becomes contaminated, remove and wash separately from household laundry before reuse.
7. Do not enter or allow worker entry into treated areas for 12 hours following application.
8. Clean spray equipment thoroughly after use.
9. Do not contaminate domestic or irrigation water, lakes, streams or ponds by the cleaning of equipment or the disposal of wastes.
10. **Caution:** Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

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.

ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms and 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.

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.

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

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE

1. Store in original, tightly-closed container.
2. Do not ship or store near food, feed, seed or fertilizers.
3. Store in cool, dry, locked, well-ventilated area without floor drain.
4. Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.

DISPOSAL

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 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.

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.

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DIRECTIONS FOR USE

DO NOT APPLY BY AIR

Sugar beets and red table beets only

Apply as a pre-plant incorporated, pre-emergence or post-emergence treatment as described in the Application Rate Table.

Do not allow spray drift to come in contact with other crops or desirable plants as damage may result.

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) and estuarine/marine habitats.

Method of application	Crop	Buffer zones (metres) required for the protection of:				Terrestrial Habitat
		Freshwater habitat of depths:		Estuarine/marine habitats of depths:		
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Sugar beets, red table beets (broadcast application to heavy or medium soils)	1	1	1	1	5
	Sugar beets, red table beets (broadcast application to light soils or postemergence broadcast application to all soils)	1	1	1	1	4
	Sugar beets, red table beets (band application)	1	1	1	1	3

*For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy or ground, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy or ground, the labelled buffer zone can be reduced by 30%.

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.

Susceptible weeds

Black nightshade, chickweed, knotweed, lady's-thumb, lamb's-quarters, oakleaf goosefoot, prostrate pigweed, purslane, ragweed, redroot pigweed, shepherd's-purse, smartweed, stinkweed, wild buckwheat, wild carrot (seedlings), wild mustard, wormseed mustard and yellow rocket (seedlings).

Beet tops

Tops of beets in **PYRAMIN FL**-treated soil or sprayed with **PYRAMIN FL** (post-emergence) may be used for human consumption or fed to livestock.

METHOD (Use one of the following)	RATE (LITRES PER HECTARE) BROADCAST
<p>1. Preplant Incorporated Fall Application (For sugar beets only in Western Canada)</p> <p>PYRAMIN FL may be applied in the fall before the ground freezes. When applied on a broadcast basis, it must be incorporated to a depth of not more than 5 cm.</p> <p>For band applications, use a ridging technique.</p> <p>Apply PYRAMIN FL in a band of not less than 17.5 cm. Cover the sprayed band with a 15 to 20 cm high ridge of soil. In the spring, level the ridges and leave guide marks to enable planting in the treated bands. Do not level deep enough to remove the treated soil from the band. Plant the beet seeds in the centre of the treated band.</p>	<p>HEAVY AND MEDIUM SOILS: PYRAMIN FL 10.25 L/ha</p> <p>LIGHT SOILS:.* PYRAMIN FL 8.25 L/ha</p> <p>Use 200 - 500 L of water per hectare</p>
<p>Spring Application</p> <p>Apply on the soil and incorporate to a depth of not more than 5 cm immediately before seeding. For band application, the seed-drill must be attached behind the spray nozzle and incorporating equipment. This method is effective in dry seasons provided soil is moist.</p> <p>In Western Canada (for sugar beets only), irrigation (1.25 cm) is necessary when soil becomes dry and no rain follows within 8 weeks after application.</p>	<p>HEAVY AND MEDIUM SOILS: PYRAMIN FL 10.25 L/ha</p> <p>LIGHT SOILS:.* PYRAMIN FL 8.25 L/ha</p> <p>Use 200 - 500 L of water per hectare</p>
<p>2. Pre-emergence</p> <p>Apply after seeding and before beets and weeds germinate. At least 1.25 cm rain after application is necessary for good weed control. When banding, apply a minimum of 20 - 35 cm band for sugar beets or 15 - 20 cm band for red table beets; see table below.</p>	<p>HEAVY and MEDIUM SOILS: PYRAMIN FL 10.25 L/ha</p> <p>LIGHT SOIL:.* PYRAMIN FL 8.25 L/ha</p> <p>Use 200 - 500 L of water per hectare</p>

METHOD (Use one of the following)	RATE (LITRES PER HECTARE) BROADCAST
3. Post-emergence Apply after the first true leaf of the beet is 2.5 cm long. Do not apply when beets are in the cotyledon stage. To obtain good control, weeds should not be larger than 3-true-leaf stage. When banding apply a 20 – 35 cm band on sugar beets or 15 - 20 cm band on red table beets centering the band over the row; see table below. As application during very hot weather may cause slight crop injury, apply during early morning or evening if weather is hot.	ALL SOILS: PYRAMIN FL 8.25 L/ha, with the addition of CITOWETT® PLUS at 250 mL/100 L of water (i.e., 2.5 L/1000 L) and apply in 300 - 400 L of water) per hectare. Use 275 - 350 kPa pressure. The use of any other oils or surfactant may cause crop injury. DO NOT USE BASF ASSIST® OIL CONCENTRATE.

* On soils classified as sands and loamy sands, crop injury can occur if the organic matter is less than 3%.

The following chart details rates of **PYRAMIN FL** and rates of water in L/ha needed for various row spacing and band widths.

SPACING		PYRAMIN FL		WATER		
Row Spacing cm	Band Width cm	10.25 L	8.25 L	200 L	300 L	500 L
30	15	5.10	4.10	100	150	250
38	20	5.40	4.35	105	160	265
55	18	3.35	2.70	65	100	165
55	20	3.75	3.00	70	110	180
55	25	4.65	3.75	90	135	225
55	30	5.60	4.50	110	165	275
55	35	6.50	5.25	125	190	320
60	18	3.05	2.45	60	90	150
60	20	3.40	2.75	65	100	165
60	25	4.25	3.45	85	125	210
60	30	5.10	4.10	100	150	250
60	35	6.00	4.80	115	175	290

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TANK MIX COMBINATION

PYRAMIN FL can be tank mixed at 5.25 L/ha with Nortron SC Sugar Beet Herbicide Suspension Concentrate at 3.65 L/ha for control of all labelled weeds on sugar beets only. One application per year is made prior to weed emergence.

NOTE: Do not apply to soils with less than 2% organic matter as crop injury may occur. Do not rotate with any crops other than sugar beets for 12 months after application.

MIXING

1. Thoroughly clean entire spray unit by flushing the system with water containing detergent.
2. Fill clean spray tank half full with clean water. Start agitation system.
3. Ensure product is in full solution before adding **PYRAMIN FL**. Add correct amount of **PYRAMIN FL** to the spray tank.
4. For post-emergent applications, add correct amount of CITOWETT PLUS.
5. Add the remaining amount of water necessary to fill the spray tank.

WARNING

When the crop is growing in unfavourable conditions, **PYRAMIN FL** may cause a decline in crop vigour and/or plant loss. Injury or plant loss may occur under conditions which include:

1. widely fluctuating temperatures and/or a period of heavy rainfall.
2. where the crop is suffering from a nutrient deficiency.
3. when soil organic matter levels are less than 3%. DO NOT apply **PYRAMIN FL** on soils with less than 3% organic matter. It should also be noted that variance in the level of organic matter is common throughout an individual field. In areas of less than 3% organic matter, crop injury may occur.
4. when climatic, soil or planting conditions are causing uneven plant emergence.
5. when rates of nitrogen fertilizer exceed those recommended for beet production and cause excessively rapid growth.

6. where the crop has been stressed by a previous herbicide.

CAUTION

1. BEETS ARE EXTREMELY SENSITIVE TO EVEN THE LOWEST DETECTABLE LEVELS OF ATRAZINE. SOIL ANALYSIS IS RECOMMENDED BEFORE PLANTING BEETS. "DO NOT APPLY PYRAMIN IF ATRAZINE IS DETECTED."
2. Do not apply this material to crops other than sugar beets and red table beets.
3. Do not allow spray drift to come in contact with other crops or desirable plants as damage may result.
4. Thoroughly clean entire spray unit before and after use by flushing the system with water containing detergent.

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **PYRAMIN FL** is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to **PYRAMIN FL** and other Group 5 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 **PYRAMIN FL** or other Group 5 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 BASF at 1-877-371-2273.

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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.

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®All other products listed are registered trademarks of their respective companies.

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