

**BETAMIX®****EMULSIFIABLE CONCENTRATE POSTEMERGENCE HERBICIDE****FOR CONTROL OF WEEDS IN SUGARBEETS****AGRICULTURAL****REGISTRATION NUMBER 19652 PEST CONTROL PRODUCTS ACT**

.... triple rinse symbol....

**GUARANTEE:**

Phenmedipham\* 75 g/L

\*Methyl m-hydroxycarbanilate m-methylcarbanilate (ester)

Desmedipham\*\* 75 g/L

\*\*Ethyl m-hydroxycarbanilate carbanilate (ester)

This product contains the toxic formulant ISOPHORONE at 55.72%

Product Information: 1-888-283-6847

Bayer CropScience Inc.  
Suite 100, 3131 114th Avenue S.E.  
Calgary, Alberta T2Z 3X2

NET CONTENTS : 10 LITRES

**READ THE LABEL BEFORE USING**

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

## BETAMIX POSTEMERGENCE HERBICIDE

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## **GENERAL INFORMATION**

### **Section 1: The Product**

BETAMIX HERBICIDE is a selective postemergence herbicide for weed control use in Sugarbeets.

## **SAFETY AND HANDLING**

### **Section 2: Precautions, Protective Clothing and Equipment, Restricted-Entry Interval**

**PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.** Harmful if swallowed. May cause irritation to eyes, nose, throat and skin. Avoid contact with eyes, skin and clothing. Avoid breathing spray mist.

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

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., contact 1-866-375-4648 or [www.cropro.org/](http://www.cropro.org/).

#### **Protective Clothing and Equipment:**

Wear protective clothing such as coveralls, a long-sleeved shirt, chemical resistant gloves and apron, eye protection (goggles or face shield) and respirator during mixing, loading, repairing, and cleanup. Change contaminated clothing daily and wash before reusing. DO NOT handle product with bare hands. Chemical resistant gloves significantly reduce hand exposure. ALWAYS wear gloves for mixing/loading operations and when making sprayer and nozzle repairs or adjustments. DO NOT USE LEATHER OR CLOTH GLOVES. After handling, rinse gloves with soap and water before removal, and wash hands thoroughly before eating, smoking or drinking. Clean protective equipment daily.

Restricted-Entry Interval (REI):

Do not reenter treated area for 24 hours following application.

### **Section 3: First Aid and Toxicological Information**

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

**If swallowed**, contact a poison control centre or a physician. DO NOT induce vomiting.

**If in eyes**, flush with water for at least 15 minutes and contact a poison control centre or get medical attention.

**In case of skin contact**, wash with soap and water.

**If inhaled**, transfer individual to fresh air.

**TOXICOLOGICAL INFORMATION:** Medical personnel should contact Bayer's medical information services toll-free 1-800-334-7577. This product contains 55.72% of isophorone which has been determined to be of toxicological concern. BETAMIX HERBICIDE is not a cholinesterase inhibitor; there is no specific antidote. Symptoms of poisoning are increased salivation and general apathy. Skin contact may cause local irritation. Contact with eyes may cause redness, swelling and discharge.

#### **Section 4: Environmental Precautions and Information**

This product is toxic to fish. Avoid contamination of any water supply.

#### **Section 5: Storage**

Store product in original container only, away from other pesticides, feeds, seeds, fertilizers, food, or feed. Not for use or storage in or around the home. Keep container closed.

#### **Section 6: Disposal**

##### **Recyclable Container 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.

**Disposal Of Unused, Unwanted Product:** 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 cleanup of spills.

**Disposal of Unused Spray Solution:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the field just sprayed, NOT ON THE CROP, away from water supplies, ditches, irrigation canals and desirable vegetation.

**DO NOT REUSE THIS CONTAINER  
IN CASE OF FIRE, LEAKY, OR DAMAGED CONTAINERS, OR OTHER  
EMERGENCY, REPORT AT ONCE BY TELEPHONE TO:  
1-800-334-7577.**

**DIRECTIONS FOR USE**

**Section 7: Crops, Weeds, Rates and Timing**

**IMPORTANT**

BETAMIX HERBICIDE may cause temporary growth retardation and/or chlorosis or tip-burn on Sugarbeets. Beets usually resume normal growth within 10 days.

**Crops and Weeds:**

BETAMIX HERBICIDE is a selective post-emergence herbicide use in Sugarbeets for the following weeds:

**Group I:** Weeds susceptible to BETAMIX HERBICIDE if sprayed before reaching the 4 leaf stage.

<b>Common Name</b>	<b>Scientific Name</b>
Lamb's-quarters	<i>Chenopodium album</i>
Wild Buckwheat	<i>Polygonum convolvulus</i>
Green Foxtail (Wild Millet)	<i>Setaria viridis</i>
Yellow Foxtail (Pigeon Grass)	<i>Setaria glauca</i>
Mustard	<i>Brassica spp. Sisymbrium spp.</i>
Pigweed	<i>Amaranthus spp.</i>

**Group II:** Weeds which may be controlled if sprayed before reaching the 2 leaf stage, when use of BETAMIX HERBICIDE is preceded by a preplant or preemergence herbicide treatment. For recommendation of a suitable preplant or preemergence treatment consult your Provincial Department of Agriculture Extension Service.

<b>Common Name</b>	<b>Scientific Name</b>
Nightshade	<i>Solanum spp.</i>
Kochia*	<i>Kochia scoparia</i>
Goosefoot	<i>Chenopodium spp.</i>

Ragweed *Ambrosia* spp.  
Stinkweed (Pennycress, French-weed) *Thlaspi arvense*

\*Spray Kochia while in the rosette stage, less than 2.5 cm in diameter.

**Rates and Timing:**

**Single (Full Rate) Application:** Apply BETAMIX HERBICIDE at the rate of 5.5 to 9.5 L in 200 to 400 L/ha of water, broadcast basis, when the weeds are in the cotyledonary up to the 4-true leaf stage. Apply only to Sugarbeets past the 2-true leaf stage.

**Repeat Application of BETAMIX HERBICIDE:** For control of later germinating weeds, make a second application of BETAMIX HERBICIDE. Use 5.5 to 7.0 L/ha of BETAMIX HERBICIDE. Allow at least 7 days between first and second applications.

**Split (Reduced Rate) Applications:** Split (reduced rate) applications of BETAMIX HERBICIDE may be applied to Sugarbeets at any stage of growth (as early as cotyledon) when necessary to control early germinating, difficult-to-control weeds. Spray BETAMIX HERBICIDE at 2.3 to 3.5 L/ha broadcast in 20 to 40 L of water. The first spray must be applied when the earliest weeds have reached the cotyledon stage.

A second application should be made 5 to 7 days following the first application, or when another flush of weeds germinates, in order to control any weeds not completely controlled by the first treatment. If the second application is delayed (i.e. by more than 7 days), full rate treatment as described above will be necessary.

**Note:** Apply the 5.5 to 9.5 L/ha rate only to Sugarbeets past the 2-true leaf stage.

Refer to the table below for the amount to use for band application.

**Dosage Chart**

Dosage Broadcast Equivalent	Band Width	Band Rate		
		Row Spacing		
		55 cm	70 cm	75 cm
2.3 L/ha	15 cm	0.60 L/ha	0.50 L/ha	0.45 L/ha
	20 cm	0.80 L/ha	0.65 L/ha	0.60 L/ha
3.5 L/ha	15 cm	0.95 L/ha	0.75 L/ha	0.70 L/ha
	20 cm	1.25 L/ha	1.00 L/ha	0.90 L/ha
5.5 L/ha	15 cm	1.50 L/ha	1.20 L/ha	1.10 L/ha
	20 cm	2.00 L/ha	1.55 L/ha	1.45 L/ha
7.0 L/ha	15 cm	1.90 L/ha	1.50 L/ha	1.40 L/ha
	20 cm	2.55 L/ha	2.00 L/ha	1.85 L/ha
9.5 L/ha	15 cm	2.50 L/ha	2.00 L/ha	1.85 L/ha
	20 cm	3.35 L/ha	2.65 L/ha	2.45 L/ha

## Section 8: Tank Mixes

### Note:

- Consult the label of the tank mix partner for further instructions regarding directions for use, restrictions and precautions. Certain tank mix partners may have additional restrictions for leaf staging.
- Do not tank mix BETAMIX HERBICIDE with pesticides, fertilizers or any other chemical additives unless recommended on this label.

TANK MIX PRODUCT	BROADCAST RATE	DIRECTIONS
BETAMIX HERBICIDE + Herbicide 273	7.0 L/ha + 1.5 - 3.25 L/ha	Use this tank mix for improved control of Smartweed and Wild Buckwheat. Use the higher rate of HERBICIDE 273 liquid only on well established 4 to 6 leaf beets which are not under stress.
BETAMIX HERBICIDE + Upbeet	1.75 - 3.5 L/ha + 35 - 70 g/ha*	Use this tank mix for control of Group I weeds plus control of Velvetleaf. A second application should be made 5 - 10 days later or as weeds germinate. If Velvetleaf is the predominant weed, use of Upbeet alone with adjuvant is preferable (see Upbeet label for proper application directions). DO NOT use an adjuvant when tank mixing BETAMIX HERBICIDE with Upbeet.

\* The total grams of Upbeet applied must not exceed 100 g/ha per growing season.



## **Section 9: Application Instructions and Cautions**

### **DO NOT APPLY BY AIR**

#### **Application Instructions:**

When used as directed, BETAMIX HERBICIDE is selective in Sugarbeets beginning at the cotyledon stage. The stage of growth of the weeds is very important for satisfactory control. For best results, spray when the weeds are between the cotyledonary and 2-true leaf stage. Best results are obtained when the weeds are actively growing and are not under water or heat stress.

#### **Application Cautions:**

BETAMIX HERBICIDE may cause beet injury if the crop is under stress from one or more of the following conditions:

- Rapid climatic change from cool, overcast days, to hot (30°C or over) bright days.
- Windy conditions or drought.
- Use of a preplant or preemergence herbicide or other chemicals.
- Insect or disease injury
- Close cultivation.

If stress conditions are present delay application in order to give plants a chance to recover.

If extreme weather conditions are of short duration, delay spraying until the end of such a period.

If BETAMIX HERBICIDE applications must be made on days with extreme temperature and sunshine, delay spraying until evening.

Do not over-treat: The use of higher than recommended rates may cause beet injury.

Do not spray while dew is present.

Rainfall within 6 hours of spraying may reduce weed kill.

Do not allow spray drift to contact adjacent crops which may be injured by spray drift.

Do not spray in excess of a total of 16.5 L/ha of BETAMIX HERBICIDE per season.

## **Section 10: Mixing Instructions**

### **MIXING THE SPRAY: MAKE SURE THE SPRAYER IS CLEAN.**

BETAMIX HERBICIDE is an emulsifiable concentrate containing 150 grams of active ingredient per litre.

The formulation contains sufficient wetting agents for optimum coverage. DO NOT add additional wetting agents or other spray adjuvants.

Add sufficient water in the tank to fill the lines.

Then add the desired amount of BETAMIX HERBICIDE and the remaining quantity of water with the bypass agitator running.

Bypass agitation is sufficient. Mechanical agitation is not recommended.

Always spray immediately after preparing the spray solution. Prepare only enough spray solution to last less than 4 hours.

## **Section 11: Livestock Feeding and Preharvest Intervals:**

**CAUTION:** Do not graze treated crops or use for livestock feed; sufficient data are not available to support such use.

Do not apply BETAMIX HERBICIDE to Sugarbeets later than 60 days prior to harvest.

## **Section 12: Herbicide Resistance Management:**

For resistance management, BETAMIX Herbicide is a Group 5 herbicide. Any weed population may contain or develop plants naturally resistant to BETAMIX Herbicide 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 BETAMIX Herbicide 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 Bayer CropScience Inc. via internet at [www.bayercropscience.ca](http://www.bayercropscience.ca) or phone 1-888-283-6847.

### **Section 13: Notices**

**NOTICE TO USER:** This control product is to be used only in accordance with the directions on this label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use a control product under unsafe conditions.

**NOTICE TO BUYER:** Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

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UpBeet is a registered trademark of E.I. DuPont de Nemours