

PM 05

45639-159

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A company of Hoechst and NOR-AM

Specimen Label

FOR AGRICULTURAL USE ONLY

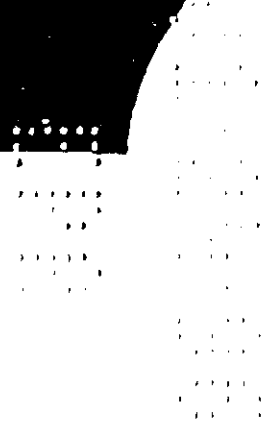
# Betamix Progress®

HERBICIDE

EPA Registration Number 45639-159

ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
FEB 9 1995

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
45639-159



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**ACTIVE INGREDIENTS:**

Phenmedipham*	7.0%
Desmedipham**	7.0%
Ethofumesate***	7.0%

<b>INERT INGREDIENTS:</b>	79.0%
<b>TOTAL:</b>	100.0%

Contains 1.8 lbs. active ingredient per gallon.  
 This product contains the toxic inert ingredient isophorone.  
 \*3-methoxycarbonylamino-phenyl-3-methylcarbanilate  
 \*\*Ethyl m-hydroxycarbanilate carbanilate (ester)  
 \*\*\*2-ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate

**EPA Reg. No. 45639-159**  
**EPA Est. No. 407-MN-1**  
 U.S. Patent No. 4,072,495 and 4,345,932

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER – PELIGRO**

**Si usted no entiende la etiqueta, busque a  
 alguien para que se la expliqué a usted en detalle.  
 (If you do not understand the label, find  
 someone to explain it to you in detail.)**

**STATEMENT OF PRACTICAL TREATMENT**

**IF SWALLOWED:** Do not induce vomiting. Call a physician or poison control center. If medical assistance cannot be given immediately, drink promptly a large quantity of *milk*, egg white, gelatin solution, or, if these are not available, large quantities of water. Avoid alcohol. Do not attempt to give anything by mouth to an unconscious (or convulsing) person. See "Note to Physician," below.

**NOTE TO PHYSICIAN:** This product contains aromatic and other organic solvents which, if aspirated into the lungs during induced vomiting, may cause chemical pneumonitis and pulmonary edema. Ingested material should be removed by gastric lavage with an endotracheal tube in place. However, please be aware that the solvents are corrosive to eyes and probable mucosal damage (by contact) may contraindicate use of gastric lavage.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**IF IN EYES:** Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical treatment.

**IF ON SKIN:** Wash immediately with plenty of soap and water.

**DO NOT REUSE THIS CONTAINER**  
**DESTROY WHEN EMPTY**

*[or when packaged in SVR containers]*

**THIS ECHO SYSTEM® CONTAINER IS THE SOLE PROPERTY OF AGREVO USA COMPANY.**

IN CASE OF MEDICAL EMERGENCIES OR HEALTH AND SAFETY INQUIRIES, OR IN CASE OF FIRE, LEAKING, OR DAMAGED CONTAINERS, INFORMATION MAY BE OBTAINED BY CALLING 800-228-5635, EXT. 202.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS  
(and Domestic Animals)  
DANGER**

**PRECAUTIONARY STATEMENTS**

**CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. DO NOT GET IN EYES OR ON CLOTHING. HARMFUL IF SWALLOWED OR INHALED. AVOID BREATHING VAPOR OR SPRAY MIST.**

**PERSONAL PROTECTIVE EQUIPMENT**

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category B on an EPA chemical resistance category selection chart.

**Applicators and other handlers must wear:**

- ◇ Long-sleeved shirt & long pants
- ◇ Shoes plus socks
- ◇ Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS STATEMENT**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**USER SAFETY RECOMMENDATIONS**

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.

**ENVIRONMENTAL HAZARDS**

THIS PESTICIDE IS TOXIC TO FISH AND AQUATIC ORGANISMS. FOR TERRESTRIAL USES, DO NOT APPLY DIRECTLY TO WATER, OR TO AREAS WHERE SURFACE WATER IS PRESENT, OR TO INTERTIDAL AREAS BELOW THE MEAN HIGH WATER MARK. DRIFT AND RUNOFF FROM TREATED AREAS MAY BE HAZARDOUS TO FISH AND AQUATIC ORGANISMS IN ADJACENT AQUATIC SITES. DO NOT CONTAMINATE WATER THROUGH DISPOSAL OF EQUIPMENT WASHWATERS.

**PHYSICAL OR CHEMICAL HAZARDS**

DO NOT USE OR STORE NEAR HEAT OR OPEN FLAME.

**STORAGE AND DISPOSAL**

**STORAGE:** Store in original container and keep closed. Store in a cool, dry place. Do not use or store near heat or open flame. Protect BETAMIX PROGRESS from freezing temperatures.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

*[or when packaged in SVR containers]*

**ECHO SYSTEM SVR Return Procedure:** Return the ECHO SYSTEM SVR container clean (outside only) and empty to the place of business from which the BETAMIX PROGRESS was purchased.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read the entire Directions for Use before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- ◇ Coveralls
- ◇ Water-proof gloves
- ◇ Shoes plus socks
- ◇ Protective eyewear

### GENERAL INFORMATION

When used as directed, BETAMIX PROGRESS is selective against weeds in sugar beets. Follow label directions carefully to avoid severe injury to sugar beets. For best results, spray weeds in the cotyledon stage which are actively growing and are not under water or heat stress.

BETAMIX PROGRESS broadens and enhances the control of troublesome weeds, including the following:

- Annual bluegrass ..... *Poa annua*
- Annual sowthistle ..... *Sonchus oleraceus*
- Black nightshade ..... *Solanum nigrum*
- Hairy nightshade ..... *Solanum sarrachoides*
- Canarygrass ..... *Phalaris canariensis*
- Coast fiddleneck ..... *Amsinckia intermedia*
- Common chickweed ..... *Stellaria media*
- Common lambsquarters ..... *Chenopodium album*
- Common ragweed ..... *Ambrosia artemisiifolia*
- Green foxtail ..... *Setaria viridis*
- Groundcherry ..... *Physalis lanceifolia*

Kochia .....	<i>Kochia scoparia</i>
Ladysthumb .....	<i>Polygonum persicaria</i>
London rocket .....	<i>Sisymbrium irio</i>
Nettleleaf goosefoot .....	<i>Chenopodium murale</i>
Pennsylvania smartweed .....	<i>Polygonum pennsylvanicum</i>
Prostrate pigweed** .....	<i>Amaranthus gracizans</i>
Purslane .....	<i>Portulaca oleraceus</i>
Redroot pigweed** .....	<i>Amaranthus retroflexus</i>
Shepherdspurse .....	<i>Capsella bursa-pastoris</i>
Yellow foxtail (Pigeongrass) .....	<i>Setaria glauca</i>
Wild buckwheat .....	<i>Polygonum convolvulus</i>
Wild mustard .....	<i>Brassica kaber</i>

\*\*Redroot pigweed and prostrate pigweed control will be improved with a tank mix of Betamix Progress and Betanex in Eastern North Dakota and Minnesota (see chart 3).

**USE PRECAUTIONS**

DO NOT APPLY BETAMIX PROGRESS TO SUGAR BEETS WITHIN 75 DAYS OF HARVEST.  
 DO NOT EXCEED A TOTAL OF 8.7 PINTS BETAMIX PROGRESS PER ACRE PER SEASON.  
 DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.  
 BETAMIX PROGRESS MAY CAUSE BEET INJURY IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:  
 DO NOT ROTATE WITH CEREAL GRAIN CROPS FOR 120 DAYS FOLLOWING POSTEMERGENCE APPLICATION WITH BETAMIX PROGRESS.

- ◇ Rapid climatic changes from cool, overcast days, to hot (80° or over) bright days. When the air temperature is, or is likely to be, above 80°F on the day of spraying, application should be made in the late afternoon when the temperature is decreasing.
- ◇ Frost within 3 days prior to application or 7 days following treatment could cause beet injury.
- ◇ 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.

**IMPORTANT:** BETAMIX PROGRESS may cause temporary growth retardation and/or chlorosis or tipburn on sugar beets. Sugar beets usually resume normal growth within 10 days.

**DO NOT OVERTREAT:** The use of higher than recommended rates may cause beet injury.

Do not spray while dew is present.

Rainfall or sprinkler irrigation 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.

**MIXING THE SPRAY: Make sure the Sprayer is CLEAN.**

BETAMIX PROGRESS contains sufficient wetting agents for optimum coverage. Do not add additional wetting agents or other spray adjuvants. Add sufficient water to fill the lines. Then add the desired amount of BETAMIX PROGRESS and the remaining quantity of water with the bypass agitator. Bypass agitation is sufficient. Mechanical agitation is not necessary. Only use freshly prepared spray emulsions.

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

### RATE OF APPLICATION

**MULTIPLE (LOW RATE) APPLICATIONS:** Multiple (low rate) applications of BETAMIX PROGRESS may be applied by air or ground to sugar beets to control early germinating weeds. The first application must be applied when the earliest emerging weeds have reached cotyledon size. See Chart 1, below, for broadcast rates. For broadcast applications with ground equipment, apply in 10-20 gallons of water per acre. Use 5-15 gallons of water per acre with aerial application. See Chart 2, below, for equivalent band rates. Any weeds which are not completely controlled by the first treatment will usually be checked and controlled by repeat applications. The repeat application should be made 5 to 7 days after the preceding application or when another flush of weeds germinates. If the second application is delayed, conventional treatment as described below will be necessary.

To avoid excessive phytotoxicity to fall-planted sugar beets in Arizona and south of the Tehachapi Mountains in California when temperatures are above 85°F, apply BETAMIX PROGRESS at the rate of 0.75-1.3 pints per acre (broadcast equivalent). Evening applications are recommended.

For further information, contact your County Agricultural Agent, Farm Advisor or AgrEvo USA Company.

**CHART 1  
DOSAGE CHART FOR  
BROADCAST APPLICATION  
(Air and Ground Applications)**

<b>Weed Stage*</b>	<b>Pints/Acre Broadcast BETAMIX PROGRESS</b>
Cotyledon	1.13-1.50
2 leaf	1.33-2.25
4 leaf	1.50-3.25

- \*Applications should begin at the cotyledon stage of the weeds.
- Higher dosage rates could be required, depending on the advancement of the weed stage.
- Do not exceed 1.5 pt./acre when sugarbeets are at the cotyledon stage.
- Early two true leaf sugar beets tend to be the most susceptible to phytotoxicity.

**CHART 2**

**DOSAGE CHART FOR BAND APPLICATION**

**Band Rate — Row Spacing (fluid ounces)**

Broadcast Equivalent	Band Width	Band Rate — Row Spacing (fluid ounces)			
		22"	24"	28"	30"
1.13 pints/acre	5"	4.1	3.8	3.2	3.0
	7"	5.7	5.3	4.5	4.2
1.25 pints/acre	5"	4.5	4.2	3.6	3.3
	7"	6.4	5.8	5.0	4.7
1.33 pints/acre	5"	4.8	4.4	3.8	3.6
	7"	6.8	6.2	5.3	5.0
1.50 pints/acre	5"	5.4	5.0	4.3	4.0
	7"	7.6	7.0	6.0	5.6
1.75 pints/acre	5"	6.4	5.8	5.0	4.7
	7"	8.9	8.2	7.0	6.5
2.25 pints/acre	5"	8.2	7.5	6.4	6.0
	7"	11.4	10.5	9.0	8.4
3.25 pints/acre	5"	11.8	10.8	9.3	8.7
	7"	16.5	15.2	13.0	12.1
5.0 pints/acre	5"	18.2	16.7	14.3	13.3
	7"	25.5	23.3	20.0	18.7

**CONVENTIONAL APPLICATIONS**

**By Ground:** Apply BETAMIX PROGRESS at the rate of 3.25 to 5.0 pints in 20 to 50 gallons water broadcast basis. For band application, see dosage chart 2 (above).

**By Air:** Apply BETAMIX PROGRESS at the rate of 3.25 to 5.0 pints per acre using 5 to 15 gallons of spray per acre.

Apply the 3.25 to 5.0 pint rates only to sugar beets past the two-true leaf stage. Use the 5.0 pint rate only on well established sugar beets which are not under stress. The stage of growth of the weeds is very important for satisfactory control. For best results, spray when the weeds are at the two-true leaf stage or smaller, are actively growing and are not under water or heat stress.

In order to avoid phytotoxic spray drift to non-target crops during application of BETAMIX PROGRESS, the following buffer zones should be observed:

- Cotton, Potatoes, Sunflowers,
- Sorghum, Wheat..... 50 feet
- Blackeye beans, Cabbage, Flax..... 100 feet
- Lettuce, Rape, Tomatoes..... 300 feet

**DO NOT APPLY WHEN WIND SPEED IS OVER 10 MILES PER HOUR. AVOID APPLICATIONS WHEN CONDITIONS FAVOR DRIFT.**

**REPEAT APPLICATION OF BETAMIX PROGRESS:** For control of later germinating weeds, make a second application of BETAMIX PROGRESS. Use 3.25 to 5.0 pints of BETAMIX PROGRESS. Allow at least 7 days between first and second applications. Apply when sugar beets have at least 4 leaves. For best results, use the higher rate and spray when weeds are at the two-true leaf stage. Apply lower rates when the sugar beets are under stress as explained on the previous page, the General Information section.

### TANK MIXES COMBINATIONS

When tank mixing, read and follow the label for each tank mix product used for precautionary statements, directions for use, weeds controlled, geographic and other restrictions. Use in accordance with the most restrictive of label limitations and precautions. No label dosage should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Betamix Progress can be tank mixed with the following broadleaf herbicides for improved broadleaf weed control if application timing is correct for the tank mix products.

Herbicide	Use Rate (pt./A)
Stinger*	0.25 - 0.50
Betanex	see chart 3

\* The Betamix Progress + Stinger tank mix should be applied when sugar beets are in the two true leaf stage or larger.

Chart 3

Dosage Chart for Tank Mixes of Betamix Progress and Betanex

Desired Rate (Pints/acre Broadcast)	Betamix Progress + Betanex (Pints/acre Broadcast)
1.13	0.57 + 0.78
1.25	0.63 + 0.88
1.33	0.67 + 0.92
1.50	0.75 + 1.00
1.75	0.88 + 1.20
2.25	1.13 + 1.60
3.25	1.63 + 2.25
5.0	2.50 + 3.50

Stinger is a registered trademark of DowElanco.



**IMPORTANT: READ BEFORE USE**

By using this product, user or buyer accepts the following conditions, warranty, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, because of extreme weather and soil conditions, manner of use and other factors beyond AgrEvo USA Company's control, it is impossible for AgrEvo USA Company to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

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