

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Ms. Vickie Forster  
 AgrEvo USA Company  
 Little Falls Centre One  
 2711 Centerville Road  
 Wilmington, DE 19308

7/27/1995

Subject: Spin-Aid Herbicide Betamix Progress Betamix  
 EPA Reg. No. 45639-76, -87, and -159.  
 RE: Amendment  
 Your submissions dated August 1, 1995.

Dear Ms. Forster:

The above mentioned amendments submitted in connection with registration under FIFRA are acceptable. However, in reference to 45639-76, please update your "Environmental Hazard" section to read; "Do not contaminate water when disposing of equipment washwaters".

A stamped copy is enclosed for your records.

Sincerely,

Robert J. Taylor  
 Product Manager (25)  
 Fungicide-Herbicide Branch  
 Registration Division (7505C)

CONCURRENCES

SYMBOL	7505C							
SURNAME	HICKS							
DATE	8.21.95							

For Agricultural Use Only

# Betamix Progres

**HERBICIDE**

EPA Registration Number 4563

ACCEPTED  
with COMMENTS  
in EPA Letter Dated

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



For Agricultural Use Only

# Betamix Progress®

SUGAR BEET HERBICIDE

Postemergence Herbicide for Control of Weeds in Sugar Beets

## ACTIVE INGREDIENTS:

Phenmedipham*	7.0%
Desmedipham**	7.0%
Ethofumesate***	7.0%
INERT INGREDIENTS:	79.0%
TOTAL:	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 explique 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 or sealed returnable containers)

**ECHO SYSTEM SVR and Sealed Container Return Procedure:** This container is to be used for BETAMIX PROGRESS Herbicide *only*. When this container is empty it must *not* be opened or discarded. Empty containers must be returned clean (*outside only*) to the place of purchase and can be refilled with BETAMIX PROGRESS Herbicide *only* at an authorized refilling agent of AgrEvo USA Company.

## 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

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

**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 running. 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.

## GENERAL INFORMATION

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

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

\*Spray kochia while in the rosette stage, less than one inch in diameter.

**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.**

**DO NOT ROTATE WITH CEREAL GRAIN CROPS FOR 120 DAYS FOLLOWING POST-EMERGENCE APPLICATION OF BETAMIX PROGRESS.**

BETAMIX PROGRESS MAY CAUSE BEET INJURY IF THE CROP IS UNDER STRESS FROM ONE OR MORE OF THE FOLLOWING CONDITIONS:

- ◆ Rapid climatic changes from cool, overcast days, to hot (80°F 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 evening when the temperature is lower.
- ◆ Frost within 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.

If extreme weather conditions are of short duration, delay spraying until the end of such a period. If BETAMIX PROGRESS applications must be made on days with extreme temperature and/or brightness, delay spraying until evening.

**DO NOT OVERTREAT:** 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.

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

## RATES 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 spray must be applied when the earliest emerging weeds have reached cotyledon size. See Chart 1, below, for broadcast rates. For broadcast applications, apply in 10–20 gallons of water per acre. See Chart 2, below, for equivalent band rates. For band applications, apply in 5–10 gallons of water per acre. 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.

**CHART 1  
DOSAGE CHART FOR  
BROADCAST APPLICATION  
(Air As Well As Ground)**

Beet/Weed Stage	Pints/Acre Broadcast BETAMIX PROGRESS
Cotyledon	1.13–1.5
2 leaf	1.33–2.25
4 leaf	1.50–3.25

- ◆ Applications should begin at the cotyledon stage of weeds
- ◆ Higher dosage rates could be required, depending on the advancement of the weed stage.
- ◆ Do not exceed 1.5 p/acre when beets are at or below the cotyledon stage.

**CHART 2  
DOSAGE CHART FOR BAND APPLICATION**

Broadcast Equivalent	Band Width	Band Rate — Row Spacing (fluid ounces)				
		22"	24"	26"	28"	30"
1.13 pints/acre	7"	5.7	5.3	4.9	4.5	4.2
	10"	8.2	7.5	6.9	6.5	6.0
1.25 pints/acre	7"	6.4	5.8	5.4	5.0	4.7
	10"	9.1	8.3	7.7	7.1	6.7
1.33 pints/acre	7"	6.8	6.2	5.7	5.3	5.0
	10"	9.7	8.9	8.2	7.6	7.1
1.50 pints/acre	7"	7.6	7.0	6.5	6.0	5.6
	10"	10.9	10.0	9.2	8.6	8.0
1.75 pints/acre	7"	8.9	8.2	7.5	7.0	6.5
	10"	12.7	11.6	10.7	10.0	9.3
2.25 pints/acre	7"	11.4	10.5	9.7	9.0	8.4
	10"	16.4	15.0	13.8	12.9	12.0
3.25 pints/acre	7"	16.5	15.2	14.0	13.0	12.1
	10"	23.6	21.7	20.0	18.6	17.3
5.00 pints/acre	7"	25.5	23.3	21.5	20.0	18.7
	10"	36.4	33.3	30.8	28.6	26.7

**CONVENTIONAL APPLICATIONS**

**By Ground:** Apply BETAMIX PROGRESS at the rate of 3.25 to 5.0 pints in 20 to 50 gallons water per acre broadcast basis. For band application, see Dosage Chart 2 (previous page).

**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 beets which are not under 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

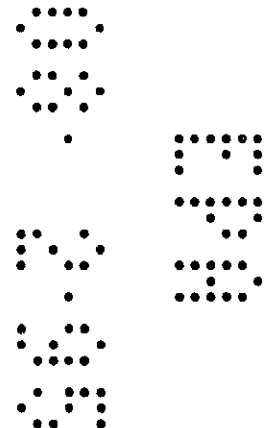
DO NOT APPLY WHEN WIND SPEED IS OVER 10 MILES PER HOUR. AVOID APPLICATIONS WHEN CONDITIONS FAVOR DRIFT.

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

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

**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 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 beets are under stress as explained on the previous page, the General Information section.



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**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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