

264-854

4-17-2008

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

17 APR 2008

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Ms. Nang-Ly Chow
Bayer CropScience
2 T.W. Alexander Drive, PO Box 12014
Research Triangle Park, NC 27709

Subject: Betanal Power Herbicide
Phenmedipham RED Label Amendment
Label submitted per DCI, received 10/29/07

Dear Ms. Chow:

The labeling referred to above, submitted in connection with reregistration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable, provided you make the following changes before you release the product for shipment.

1. Add an appropriate EPA Establishment Number and Net Contents information to the label.
2. Revise "Do not give any liquid to the person" from the IF SWALLOWED statement to "Have person sip a glass of water if able to swallow"
3. Remove the statement "Wear protective eyewear. Wear long-sleeved shirt and long pants, socks, shoes and chemical-resistant gloves such as barrier laminate or butyl rubber \geq 14 mils" from the PRECAUTIONARY STATEMENTS section
4. Please note: Protective eyewear is not required to be listed in the PERSONAL PROTECTIVE EQUIPMENTS section, but may remain on the label.
5. Add the statement "For more information, follow instructions in Supplement Three of PR Notice 93-7" after the statement "Some materials that are chemical-resistant to this product are barrier laminate or butyl rubber $>$ 14 mils" in the PPE section
6. Add "Users should" before the three statements in the section USER SAFETY RECOMMENDATIONS
7. Revise the REI in the AGRICULTURAL USE REQUIREMENTS box from 12 hours to 24 hours, as the most restrictive REI of all active ingredients in the product is required.
8. On page 5, revise the statement "Do not rotate with cereal grain crops for 120 days following postemergence application with *Progress Ultra*" must be revised per the phenmedipham RED to read "Do not plant or transplant cereal grains in treated area for at least 120 days following an application of this product."

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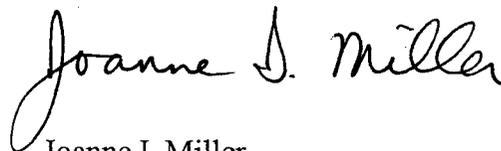
9. On page 5, revise the statement "Do not overtreat: The use of higher than recommended rates may cause beet injury" to "Do not exceed specified label rates."
10. On page 5, revise "Evening applications are recommended" to "Apply in the evening"
11. On page 6, remove the statement "Higher dosage rates could be required, depending on the advancement of the weed stage" under CHART 1
12. On page 6, add "specified" after "higher rate" in the statement "For best results, use the higher rate and spray when weeds are at the two true-leaf stage."
13. On page 7, revise the statement "No label dosage should be exceeded" to "No label dosage may be exceeded"
14. On page 7, revise the * statement following DOSAGE CHART 4 to the following: "Rate can be increased to the higher end of the specified rate range when the smallest sugar beet plants in the field are in the 4-ture leaf stage or larger."
15. On page 7, revise "strongly recommended" to "the preferred method of application" in the statement "Application of Betanal Power Herbicide in broadcast applications is strongly recommended."
16. On page 7, revise "recommended" to "specified" in the statement "Use the minimum rate recommended on the tank mix partner label...."
17. On page 8, revise the statement "No label dosage should be exceeded" to "No label dosage may be exceeded"

Submit one (1) copy of final printed labeling incorporating the above changes before you release the product for shipment. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records.

If you have any questions, contact Hope Johnson at 703-305-5410.

Please note: Final product reregistration cannot be considered until after all active ingredients in this product are eligible for reregistration.

Sincerely,



Joanne I. Miller
Product Manager 23
Herbicide Branch
Registration Division (7505P)

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Betanal Power Herbicide

FOR AGRICULTURAL USE ONLY

Postemergence Herbicide for Control of Weeds in Sugar Beets

ACTIVE INGREDIENT:

Phenmedipham*	13.1%
Desmedipham**	10.2%
Ethofumesate***	15.9%

INERT INGREDIENTS: 60.8%

Contains 1.14 lbs phenmedipham, 0.89 lb desmedipham and 1.39 lbs ethofumesate per gallon. **TOTAL: 100.0%**

- * CAS Number: 13684-63-4
- ** CAS Number: 13684-56-5
- *** CAS Number: 26225-79-6

**ACCEPTED
with COMMENTS
in EPA Letter Dated:
17 APR 2008**

EPA Reg No. : 264-854

EPA Est. No.:

KEEP OUT OF REACH OF CHILDREN CAUTION

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

264-854

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF ON SKIN:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a Poison Control Center or doctor immediately for treatment advice. • Do not induce vomiting unless told to do so by the Poison Control Center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • 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 center or doctor for treatment advice.
<p>For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.</p> <p>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p>	
Note To Physician: There is no specific antidote. Treat patient symptomatically.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through the skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Wear protective eyewear. Wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves such as barrier laminate or butyl rubber ≥ 14 mils.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are barrier laminate or butyl rubber ≥ 14 mils. If you want more options, follow the instructions for Category B on an EPA chemical resistance category selection chart.

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Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks, and
- Chemical-resistant gloves for mixers and loaders,
- 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 exist, 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. Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

USER SAFETY RECOMMENDATIONS

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco, or using the toilet. Remove clothing/PPE 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.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic organisms. 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 when cleaning equipment or disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE 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 Progress Ultra Herbicide from freezing temperatures.

PESTICIDE 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.

WHEN PACKAGED IN PLASTIC CONTAINERS:

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.

DO NOT REUSE THIS CONTAINER, DESTROY WHEN EMPTY.

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 Betanal Power Herbicide was purchased.

This ECHO SYSTEM SVR container is the sole property of Bayer CropScience.

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 12 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

PRACTICES TO LOWER THE POTENTIAL FOR SPRAY DRIFT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interactions of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. In order to avoid phytotoxic spray drift to nontarget crops during application of Progress Ultra Herbicide, the following buffer zones should be observed:

Cotton, Potatoes, Sunflowers, Sorghum, Wheat	50 feet
Blackeye Beans, Cabbage, Flax	100 feet
Lettuce, Canola, Tomatoes	300 feet

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

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outermost nozzles on the boom must not exceed the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream, and never be pointed downward more than 45 degrees.

Where States or Tribes have more stringent regulations, they should be observed.

The applicator should be familiar with, and take into account, the information covered in the following section: "Aerial Drift Reduction Advisory Information."

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions. (See "Wind," "Temperature and Humidity," and "Temperature Inversions.")

CONTROLLING DROPLET SIZE

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

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BOOM LENGTH

- The boom length must not exceed 70% of the wingspan or 85% of the rotor blade diameter.

Application Height

- Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT

- When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.).

WIND

- Drift potential is lowest between windspeeds of 2 to 10 m.p.h.. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 m.p.h. due to variable wind direction and high inversion potential.

NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

- When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS

- Do not make any type of application into temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light-to-no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if the fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS

- The pesticide should be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (e.g., when wind is blowing away from sensitive areas).

GENERAL INFORMATION

When used as directed, Betanal Power Herbicide controls weeds in sugar beets. For best results, spray weeds in the cotyledon stage which are actively growing and are not under water or heat stress.

Betanal Power Herbicide 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 *Kochia scoparia*
- Ladysthumb..... *Polygonum persicaria*
- London rocket..... *Sisymbrium irio*
- Nettleleaf goosefoot *Chenopodium murale*
- Pennsylvania smartweed..... *Polygonum pennsylvanicum*
- Prostrate pigweed* *Amaranthus gracizans*

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Purslane *Portulaca oleraceus*
 Redroot pigweed* *Amaranthus retroflexus*
 Shepherdspurse *Capsella bursa-pastoris*
 Yellow foxtail (Pigeongrass) *Setaria glauca*
 Wild buckwheat *Polygonum convolvulus*
 Wild mustard *Brassica kaber*

* Redroot pigweed and prostrate pigweed control will be improved with a tank mix of Betanal Power Herbicide and Betanal® Compact Herbicide in Eastern North Dakota and Minnesota (see Chart 3).

GENERAL PRECAUTIONS AND RESTRICTIONS

DO NOT APPLY BETANAL POWER HERBICIDE TO SUGAR BEETS WITHIN 75 DAYS OF HARVEST.

DO NOT EXCEED A TOTAL OF 0.67 lb a.i. PHENMEDIPHAM and 0.53 lb a.i. DESMEDIPHAM and 0.82 lb a.i. ETHOFUMESATE (4.7 PINTS PROGRESS ULTRA HERBICIDE) PER SEASON.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

DO NOT ROTATE WITH CEREAL GRAIN CROPS FOR 120 DAYS FOLLOWING POSTEMERGENCE APPLICATION WITH PROGRESS ULTRA.

BETANAL POWER HERBICIDE 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 late afternoon or evening 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: Betanal Power Herbicide 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.

Betanal Power Herbicide contains sufficient wetting agents for optimum coverage. Add sufficient water to fill the lines. Then add the desired amount of Betanal Power 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.

RATE OF APPLICATION

MULTIPLE (LOW RATE) APPLICATIONS

Multiple (low rate) applications of Betanal Power Herbicide 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 for broadcast rates. For broadcast applications with ground equipment, apply in 10 to 20 gallons of water per acre. Use 5 to 15 gallons of water per acre with aerial application. See Chart 2 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 south of the Tehachapi Mountains in California when temperatures are above 85°F, apply Betanal Power at the rate of 0.4 pint per acre (broadcast equivalent). Evening applications are recommended.

For further information, contact your County Agricultural Agent, Farm Advisor or Bayer CropScience.

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

Weed Stage*	Pints/Acre Broadcast Betanal Power Herbicide
Cotyledon	0.6-0.8
2 leaf	0.7-1.2
4 leaf	0.8 – 1.73

- *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 0.8 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

Broadcast Equivalent	Band Width	Row Spacing Band Rate (fluid ounces)			
		22"	24"	28"	30"
0.57 pints/acre	5"	2.0	1.9	1.6	1.5
	7"	2.8	2.7	2.2	2.1
0.63 pints/acre	5"	2.2	2.1	1.8	1.7
	7"	3.2	2.9	2.5	2.3
0.67 pints/acre	5"	2.4	2.2	1.9	1.8
	7"	3.4	3.1	2.7	2.5
0.75 pints/acre	5"	2.7	2.5	2.2	2.0
	7"	3.8	3.5	3.0	2.8
0.87 pints/acre	5"	3.2	2.9	2.5	2.4
	7"	4.4	4.1	3.5	3.7
1.12 pints/acre	5"	4.1	3.7	3.2	3.0
	7"	5.7	5.2	4.5	4.2
1.63 pints/acre	5"	5.9	5.4	4.7	4.3
	7"	8.2	7.6	6.5	6.0
2.5 pints/acre	5"	9.2	8.3	7.1	6.7
	7"	12.7	11.6	10.0	9.3

CONVENTIONAL APPLICATIONS

By Ground: Apply Betanal Power Herbicide at the rate of 1.73 to 2.65 pints in 10 to 50 gallons water broadcast basis. For band application, see Chart 2.

By Air: Apply Betanal Power Herbicide at the rate of 1.73 to 2.65 pints per acre using 5 to 15 gallons of spray per acre.

Apply the 1.73 to 2.65 pint rates only to sugar beets past the two true-leaf stage. Use the 2.65 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.

REPEAT APPLICATION OF BETANAL POWER HERBICIDE: For control of later germinating weeds, make a second application of Betanal Power Herbicide. Use 1.73 to 2.65 pints of Betanal Power Herbicide. 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 in the *General Precautions and Restrictions* section.

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TANK MIX 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.

Betanal Power Herbicide 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® Ultra	See Chart 3

*The Betanal Power Herbicide + 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 BETANAL POWER HERBICIDE AND BETANEX® ULTRA HERBICIDE

Equivalent Betanal Power Desired Rate (Pints/acre Broadcast)	Betanal Power + Betanex® Ultra (Pints/acre Broadcast)
0.57	0.28 + 0.41
0.63	0.32 + 0.46
0.67	0.34 + 0.49
0.75	0.375 + 0.53
0.88	0.44 + 0.64
1.13	0.57 + 0.85
1.63	0.87 + 1.20
2.50	1.25 + 1.85

MICRO-RATE APPLICATIONS (EXCEPT CALIFORNIA)

Multiple Micro-rate applications of Betanal Power Herbicide in tank mixtures with reduced rates of UpBeet®, Stinger®, and modified seed oils may be applied by air or ground equipment to sugar beets to control early germinating weeds.

Favorable climatic conditions (good conditions for plant growth and development) are essential for adequate weed control.

DOSAGE CHART 4

DOSAGE CHART FOR MULTIPLE MICRO-RATE BROADCAST APPLICATIONS

Sugar Beet Stage	Betanal Power Herbicide Fluid Ounces/Acre Broadcast
Cotyledon to 4-leaf	3.1 (equivalent to 0.08 lb. ai/A)
4-Leaf*	3.1 – 4.6 (equivalent to 0.08 – 0.12 lb. ai/A)

* Rate can be increased when the smallest sugar beet plants in the field are in the 4-true leaf stage or larger.

Application of Betanal Power Herbicide in broadcast applications is strongly recommended. If band applications are used, do not use less than 11-inch bands.

For broadcast applications of Betanal Power Herbicide with selected tank mix partners, apply in 10 to 20 gallons of water per acre for ground application, or 5 to 15 gallons of water per acre for aerial application. Use the minimum rate recommended on the tank mix partner label, or a reduced rate of the tank mix partner(s), at the discretion of the grower or applicator, as permitted under FIFRA. [Minimum label rate for UpBeet® is 0.5 oz/acre; for Stinger®, 4.0 fl oz/acre.]

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Use modified seed oils at a finished spray concentration of 1.5% v/v or a minimum of 1 pt/acre. A minimum of three sequential applications should be used. Accurate timing is essential; make initial application immediately after weeds emerge, and make repeat applications on 5- to 7-day intervals. If weed control is not adequate due to climatic conditions, spray coverage or other factors, return to multiple (low rate) applications.

Betanal Power Herbicide can be mixed with UpBeet®, Stinger®, and modified seed oils for use on sugar beets in accordance with the most restrictive label limitations and precautions. No label dosage rates should be exceeded. Betanal Power Herbicide cannot be mixed with any product containing a label prohibition against such mixing.

Fungicides or insecticides can be tank mixed with Betanal Power Herbicide plus UpBeet® plus Stinger® plus methylated seed oils, however, do not combine both fungicides and insecticides with micro-rate mixtures.

MIXING INSTRUCTIONS FOR MICRO-RATE MULTIPLE APPLICATIONS OF BETANAL POWER HERBICIDE

1. Start with a clean spray tank.
2. Fill spray tank with one-third of the total amount of clean water needed for application and start gentle agitation.
3. Slurry UpBeet® in water before adding to spray tank, then add slurried UpBeet® to spray tank.
4. Fill spray tank to two-thirds of the total amount of clean water needed for the application.
5. Add Betanal Power Herbicide followed by Stinger®, then modified seed oil.
6. Add remaining amount of water while continuing gentle agitation. Spray immediately. Spray mixture should not remain in spray tank overnight.

USE PRECAUTIONS FOR MICRO-RATE APPLICATIONS

Not all weeds will be adequately controlled, even with favorable climatic conditions. Micro-rate applications of Betanal Power Herbicide mixed with UpBeet® and Stinger® will not control ALS-resistant kochia. Multiple low rates of Betanal Power Herbicide and/or hand labor may be required if multiple micro-rate applications do not adequately control weeds.

Multiple micro-rate applications may injure sugar beets if climatic conditions rapidly change from cool, wet, overcast days to bright sunny days. Plugging of spray nozzles may be encountered due to the potential formation of a precipitate in the spray solution that is often associated with micro-rate applications. To minimize potential formation of precipitate, start with a clean spray system, use warm spray water for mixing, completely empty spray solution from each tank load, flush tank and lines between loads with fresh water, never leave diluted spray solution in tank overnight, and/or add ammonia (2% household) at 1% v/v or a basic pH blend additive (A basic pH blend additive is a formulated combination of a non-ionic surfactant and a nitrogen source) at 1% v/v. DO NOT apply micro-rate treatments when conditions are favorable for drift to nontarget species.

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IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

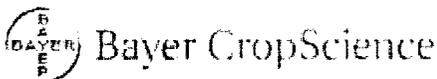
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