

PM 25  
19713-227

page 1 of 10



BETTER BEET  
Herbicide

ACCEPTED  
NOV 1 0 1987  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 19713-227

For weed control in sugar beets and red table beets.

A flowable containing:

ACTIVE INGREDIENTS\*:

Pyrazon (5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone) . . . . . 44.2%

INERT INGREDIENTS: . . . . . 55.8%

\*Equivalent to 4.32 pounds per gallon of pyrazon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center. Drink promptly a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water, avoid alcohol.

IF IN EYES: Immediately flush eyes with plenty of water and get medical attention.

IF ON SKIN: Immediately remove contaminated clothing, INCLUDING SHOES, and wash skin with soap and plenty of water. If irritation develops, send for a physician.

See Side Panel For Additional Precautionary Statements.

EPA Registration No. 19713-  
EPA Establishment No. 19713-MS-1

SHAKE WELL BEFORE USING.

NET CONTENTS: 2 1/2 gallons

Manufactured by: Drexel Chemical Company  
P.O. Box 9306  
Memphis, Tenn. 38109

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals.**

**CAUTION: HARMFUL IF SWALLOWED. Avoid Breathing of Spray. Do Not Take Internally. Causes temporary eye irritation. Do not get in eyes or on clothing. Wear goggles. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.**

**ENVIRONMENTAL HAZARDS**

**Do not apply directly to water. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of waste.**

**This product is toxic to fish. Do not apply directly to lakes, streams and**

**PHYSICAL OR CHEMICAL HAZARDS**  
**ponds.**

**Do not use, pour, spill or store near heat or open flame.**

**Farm Worker Safety Statements**

Do not enter treated areas without protective clothing until sprays have dried.

Because certain states may require more restrictive reentry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. Oral warnings must inform workers of areas or fields that may not be entered without specific protective clothing until sprays have dried, and

appropriate actions to take in case of accidental exposure, as described under Precautionary Statements on this label. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. CAUTION. Area treated with Pyrazon / on [date of application]. Do not enter without appropriate protective clothing until sprays have dried. In case of accidental exposure, flush eyes or skin with plenty of water. Call physician if irritation persists. Remove and wash contaminated clothing before reuse.

**DIRECTIONS FOR USE****BEST AVAILABLE COPY**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. All labels.

Among the weeds controlled by BETTER BEET are lambsquarters, pigweed, ragweed, shepherdspurse, fanweed, purslane, nightshade, mustard, henbit, smartweed, nettleleaf goosefoot and velvetleaf (Michigan and Ohio only).

Control of grass has been variable with BETTER BEET. Where grasses are a serious problem, follow directions on this label for control of grasses with specific BETTER BEET combinations, or use a separate treatment for grasses labeled for use in sugar beets or red table beets.

Do not use BETTER BEET as a broadcast treatment in the dry irrigated areas.

Various methods of BETTER BEET use are preferred in different areas. Use one of the methods and herbicide rates indicated on this label as suggested by local authorities.

See Precautions and Mixing Directions on side panel.

For Band Treatments see side panel.

## **SUGAR BEETS**

4710

Two applications of BETTER BEET can be used in the Central and Eastern states only. Do not apply more than a total of 6 quarts per acre per season as excessive chemical residue may result.

### **PRE-EMERGENCE APPLICATIONS**

#### **Central and Eastern States**

Pre-emergence without Irrigation - Apply BETTER BEET at the rate of  $2\frac{1}{2}$  to 3 quarts/acre in enough water for good coverage. Use the lower rate on sandy loam soils. Spray immediately after beet seeds are planted and before beets and weeds emerge. Use of a planter-mounted band sprayer ensures that all planted beets are treated and that band width and rate of chemical are uniform.

Where annual grasses are also a problem, apply 4 to 8 lbs./acre of TCA with the recommended rate of BETTER BEET. Follow label directions for both products.

Where dry weather follows application and weeds emerge, use a shallow cultivation before weeds are 2 inches tall. Otherwise, do not disturb or cover the treated band.

For soils with organic matter of 5-7% in the Red River Valley - In the Red River Valley only, for the control of redroot and prostrate pigweeds, common lambsquarters and wild mustard in soils with organic matter content of 5 to 7%, apply BETTER BEET at the rate of 6 quarts/acre as a single pre-emergence application. Spray immediately after beet seeds are planted and before beets and weeds emerge. Do not follow with a post-emergence treatment of BETTER BEET. Do not use the 6 quart rate on soils with organic matter higher than 7% or less than 5% since this may result in unsatisfactory weed control or crop injury, respectively.

Where dry weather follows application or where annual grasses are also a problem, refer to section titled Pre-emergence without Irrigation.

For velvetleaf control in Michigan and Ohio - In Michigan and Ohio only, for the control of velvetleaf, apply BETTER BEET at the rate of  $4\frac{3}{4}$  quarts/acre as a single pre-emergence application. Spray immediately after beet seeds are planted and before beets and weeds emerge. Do not use the  $4\frac{3}{4}$  quart rate on soils with organic matter higher than 5% or less than  $2\frac{1}{2}\%$  since this may result in unsatisfactory weed control or crop injury, respectively.

Where dry weather follows application or where annual grasses are also a problem, refer to section titled Pre-emergence without Irrigation.

### **PLAINS, MOUNTAIN AND WESTERN STATES**

#### **Pre-emergence with Sprinkler Irrigation**

If sprinkler irrigation is used, apply BETTER BEET as a banded surface pre-emergence application. Do not incorporate BETTER BEET where sprinkler irrigation is to be used, as crop injury may result. Do not use broadcast treatments. Prepare the seedbed and pre-irrigate to the field capacity of the soil. Plant seed  $\frac{3}{4}$  to one inch deep.

Immediately, or within 3 days after planting, apply BETTER BEET at the rate of  $2\frac{1}{2}$  quarts/acre on low organic matter loam soils or 3 quarts/acre on loam and clay soils. Follow directions for banded treatments shown

more than  $3/4$  inch of sprinkler-irrigation per set before beets and weeds emerge, as greater amounts may cause beet injury. Repeat as needed to get good beet emergence. Do not exceed  $3/4$  inch of sprinkler irrigation per set until the beets have 2 true leaves. (Do not count the cotyledonary leaves, which are the first 2 leaves to appear.)

#### Preplant Incorporation with Furrow Irrigation

On fields to receive furrow irrigation, use the following planting procedure. Prepare seedbed or form beds for planting. On low organic matter, sandy loam soils, apply and incorporate BETTER BEET at the rate of  $2\frac{1}{2}$  quarts/acre. On loams, silt loams and clays, use the 3 quarts/acre rate. Follow directions for banded treatments shown on side panel and adjust application rates accordingly. Use a rotary tiller type of incorporator and incorporate not more than 2 inches deep. Plant beets and furrow irrigate. Since BETTER BEET must have moisture to control weeds effectively, irrigate until tops of beds are thoroughly wetted.

Repeat furrow irrigation as often as necessary to ensure good beet emergence and growth. Sprinkler irrigation can be substituted for furrow irrigation after the beets have developed 2 true leaves. (Do not count the cotyledonary leaves which are the first 2 leaves to appear.)

To assure planting into treated bands, do the following things all in one tractor operation: (1) spray BETTER BEET, (2) incorporate, and (3) plant beets. Treat a band 1 or 2 inches wider than the tiller head used. Do not incorporate BETTER BEET with a disc because unsatisfactory weed control and sugar beet injury may result.

#### BETTER BEET + Herbicide 283 - Tank Mix

For pre-emergence control of additional weeds in sugar beets including green foxtail, kochia and wild buckwheat in Colorado, Nebraska, Idaho and Wyoming, combine  $1\frac{3}{4}$  to  $2\frac{1}{2}$  quarts/acre of BETTER BEET with 3 to 6 quarts of Herbicide 283 in the spray tank and apply in 20 to 40 gallons of water per acre (broadcast basis). Follow directions and precautions on this label and those on the Herbicide 283 label and directions for local conditions.

#### BETTER BEET + Nortron<sup>®</sup> EC or Flowable Herbicides For Winter-grown Sugar Beets in California

In fields where wild oats and volunteer cereals are expected to be a problem use a tank mixture of BETTER BEET plus Nortron at recommended rates listed in the following rate table. When mixing BETTER BEET in the spray tank with Nortron, add BETTER BEET first and agitate spray solution thoroughly, then add Nortron.

Under sprinkler irrigation or where natural rainfall is adequate, apply this tank mix pre-emergence. See Pre-emergence with Sprinkler Irrigation above for directions and precautions regarding application of sprinkler irrigation. Where furrow irrigation is to be used, apply this tank mix preplant. See Preplant Incorporation with Furrow Irrigation above for directions and precautions regarding application of furrow irrigation. Do not use the mixture under conditions where Nortron alone is not recommended. Before use, read Nortron label for additional information and precautions.

| Application Rate Table  |                       |                                |                      |
|---|-----------------------|--------------------------------|----------------------|
| Soil Texture  | 10 Inch Band Width(1) |                                |                      |
|   | Nortron<br>EC/Acre(2) | Nortron<br>Flowable<br>Acre(3) | BETTER BEET/<br>Acre |
|   | 30" Row               | 30" Row                        | 30" Row              |
| Coarse Textured Soils:<br>Sands, loamy sands,<br>and sandy loams  | NOT RECOMMENDED       |                                |                      |
| Medium Textured Soils:<br>Silt loams, clay loams<br>which contain less than<br>3% organic matter  | 2 2/3 Pints           | 1 Pint                         | 3/4 Quart            |
| Fine Textured Soils:<br>Clay loams which<br>contain more than 3%<br>organic matter and clays  | 3/4 Pints             | 1 1/3 Pints                    | 3/4 Quart            |
| (1) For other band or row widths, adjust rates in proportion to the area actually treated. Do not apply this mixture broadcast.<br>(2) Nortron EC (1.5 lb. active ingredient per gallon).<br>(3) Nortron Flowable (4.0 lb. active ingredient per gallon). |                       |                                |                      |

#### POST-EMERGENCE APPLICATIONS

##### GENERAL DIRECTIONS - All Areas

Timing is very important. Observe weed growth daily. Treat after beets have 2 expanded true leaves (do not count the cotyledonary leaves which are the first 2 leaves to appear) and before any weeds have more than 2 to 4 true leaves. Treatments on larger weeds will not be effective.

Good soil moisture prior to treatment is necessary. If soil is dry, irrigation is recommended prior to chemical application. For optimum performance, a post-emergence application should be followed with moisture. Where furrow irrigation is possible, irrigate shortly after application to the point that top surface of beds has reached maximum water-holding capacity. If sprinkler irrigation is used, do not apply more than 3/4 inch of water on the first set after the herbicide is applied.

Do not apply BETTER BEET if weeds are stressed by lack of moisture, excessive heat, high winds, frost or low temperature, as insufficient weed control may result. Wait until more favorable conditions prevail before applying.

In the Central and Eastern states, these combinations can follow pre-emergence use of BETTER BEET provided a total of 6 quarts BETTER BEET per acre per season is not exceeded.

The addition of a surfactant such as Surf-Ac 820 spreader sticker or its equivalent often improves results of post-emergence treatments. However, certain surfactants will seriously injure sugar beets. Consult your Experiment Station or Extension Service Weed Specialist for the suggested surfactant in your area.

BEST AVAILABLE COPY

**BETTER BEET + Dalapon - All Areas**

Where grass and broadleaf weeds are present, use  $2\frac{1}{2}$  to 3 quarts of BETTER BEET per acre mixed with dalapon, according to state recommendations and directions on the dalapon product label. Where broadleaf weeds are the principal problem, use BETTER BEET with 1 gallon per acre of non-phytotoxic, emulsifiable oil or use 1 quart of Peptoil (for directions, see below). These mixtures may burn beet leaves or cause temporary stunting under some conditions. Do not apply when sugar beet foliage is wet.

**BETTER BEET + Betanal<sup>®</sup> - All Areas**

For broad spectrum weed control including pigweed, kochia, wild buckwheat, lambsquarters, smartweed, mustard, nightshade, ragweed and green and yellow toxtails, combine  $2\frac{1}{2}$  quarts of BETTER BEET and 3 quarts of Betanal per acre. This combination provides residual as well as quick post-emergence weed control. Follow the directions on the labels of both products. Add the Betanal to the half-full spray tank after the BETTER BEET is adequately suspended. Do not add additional surfactants to the mixture. Do not apply in more than 30 gallons of water per acre.

**BETTER BEET + Non-Phytotoxic Emulsifiable Oil - All Areas**

Addition of a non-phytotoxic emulsifiable oil to BETTER BEET may improve broadleaf weed control and allow greater flexibility in timing of successful applications relative to size of weeds. Apply  $2\frac{1}{2}$  to 3 quarts BETTER BEET per acre according to soil type and organic matter content with 1 gallon of non-phytotoxic, emulsifiable oil or use 1 quart of Peptoil per acre (broadcast basis). Use sufficient spray solution for good coverage, 40-100 gallons per acre treated. Use a non-phytotoxic oil containing 2% emulsifier and characterized as having an unsulphonated residue of over 95%.

Add BETTER BEET first and mix thoroughly in the spray tank, then add the emulsifiable oil with the agitator running. Finally fill the tank with water to required volume.

Do not use oil when maximum temperatures are expected to exceed 90°F at any time during the five-day period following the application as excessive crop injury may result.

For specific directions for using a non-phytotoxic oil with BETTER BEET in your locality and for recommended brands of oil to use, consult your local State Extension Weed Specialist.

Increased temporary sugar beet injury has been observed where BETTER BEET combination treatments have followed preplant applications of Tillam<sup>®</sup> or Ro-Neet<sup>®</sup>.

**RED TABLE BEETS**

**Pre-emergence Application**

Apply  $2\frac{1}{2}$  to 3 quarts per acre of BETTER BEET in enough water for good coverage. Use lower rate on sandy loam soils. Spray after beet seeds are planted but before beets and weeds emerge.

BEST AVAILABLE COPY

If rain does not fall within 5 to 10 days after treatment, beets should be irrigated to activate BETTER BEET. If irrigation is not possible, use a shallow cultivation before weeds are 2 inches tall.

#### Early Post-emergence Application

Apply 3 quarts per acre of BETTER BEET.

Timing is very important. Observe weed growth daily. Treat after beets have 2 expanded true leaves and before any weeds have more than 2 to 4 true leaves. This is usually within 2 weeks after planting. Treatment on larger weeds will not be effective.

NOTE: BETTER BEET may be used both pre- and post-emergence in the same season. Follow directions given on this label for each type of application.

#### MIXING DIRECTIONS

Use 20 to 40 gallons of water per acre, broadcast basis, or proportionately less for banded applications.

Fill sprayer tank half-way with water. Start agitation with a mechanical or good by-pass agitator. Assure adequate hydraulic agitation. While agitating, add the required amount of BETTER BEET. Add water to fill tank to required volume.

Continue agitation during spraying. Mix only the amount of spray that will be used immediately.

Use 50 mesh screens in the line and Tee-jet 8004E nozzles, or larger, or their equivalent.

#### BAND TREATMENT

##### Sugar Beets

When spraying a band over the row, the amount of BETTER BEET applied per banded acre is reduced in proportion to the area actually treated.

Example: To spray a 7-inch band over beets in rows 28 inches apart, the amount of BETTER BEET applied per banded acre is one-fourth the amount recommended for broadcast applications.

Three quarts/acre  $\times \frac{1}{4}$  of area banded = Three-quarters quarts/banded acre.

| Band and Row Width           | Quarts BETTER BEET Per<br>Banded Acre for<br>Broadcast Rate of: |                |
|------------------------------|---|----------------|
|                              | 3 Quarts/Acre   | 3½ Quarts/Acre |
| 7-inch band on 22 inch rows  | ¾   | 1              |
| 7-inch band on 28 inch rows  | 2/3   | ¾              |
| 10-inch band on 22 inch rows | 1   | 1½             |
| 10-inch band on 28 inch rows | ¾   | 1              |

Using planter-mounted band sprayers ensures that all planted beets are treated, and that band width and rate of chemical are uniform.



**BAND TREATMENT****Red Table Beets**

When spraying a band over the row, the amount of BETTER BEET applied per acre is in proportion to the area actually treated.

Example:

| Beet Rows 24 inches<br>apart and band width of: | Quarts BETTER BEET<br>Per Banded Acre for<br>Broadcast Rate of: |                |
|---|---|----------------|
|   | 3 Quarts/Acre   | 3½ Quarts/Acre |
| 6-inch band                                     | 2/3   | 3/4            |
| 12-inch band                                    | 1½  | 1½             |

**PRECAUTIONS:**

Do not use this product on soils classified as sands or loamy sands because this may result in crop injury. Do not use pre-emergence on muck and peat.

Do not use on soils with organic matter higher than 5%, except in the Red River Valley (See Special Section), or less than 2½% since this may result in unsatisfactory weed control or crop injury.

Do not use BETTER BEET as a broadcast treatment in the dry-irrigated regions.

If the beet crop is lost due to climatic or soil conditions following application of BETTER BEET do not plant other crops in the BETTER BEET-treated land during the same season. If fields are replanted to sugar beets, reseed into the treated band. Do not use BETTER BEET again as a pre-emergence treatment on the replanted beets because crop injury may result.

Do not use the same spray equipment for other purposes unless thoroughly cleaned. Coarse sprays are less likely to drift. Do not store near fertilizers, seeds, insecticides or fungicides. Do not contaminate water used for irrigation or domestic purposes.

Where this material is used in combination with TCA, do not use treated beet tops for feed or forage. Do not mix BETTER BEET with liquid fertilizers.

Observe all cautions and limitations on labeling of all products used in mixtures.

REPLY ADDRESS HERE

Betanal is a trademark of Schering Aktiengesellschaft, Berlin Bergkamen  
Nortron is a trademark of Fisons Limited  
Tillam and Ro-Neet are trademarks of Stauffer Chemical Company, U.S.A.

## STORAGE AND DISPOSAL

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

**STORAGE INSTRUCTIONS:** Storage should be under lock and key and secure from access by unauthorized persons and children. Storage should be in a cool dry area away from any heat or ignition source. Avoid storage at high temperatures. Do not stack over 2 pallets high. Move containers by handles or cases. Do not move containers from one area to another unless they are securely sealed. Keep container tightly sealed when not in use. Keep away from any puncture source. Avoid contamination with acids or alkalies. Store in original containers only. If the contents are leaking or material is spilled follow these steps:

1. Contain spill, absorb with a material such as saw dust, clay granules or dirt.
2. Collect and place in suitable containers for disposal.
3. Wash area with water and soap to remove remaining pesticide.
4. Follow washing with clean water rinse.
5. Place a leaking container in a plastic tub and transfer contents as soon as possible to an empty original container.
6. Do not allow run off to enter sewer or contaminate water supplies.
7. Dispose of waste as indicated below.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning, if burned, stay out of smoke.

### WARRANTY - CONDITION OF SALE:

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended, and other influencing factors in the use of this product are beyond the control of the seller. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

In no case shall Drexel or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by Drexel Chemical Company and is accepted as such by the Buyer.