

7969-81

10/20/2009

1/12



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505P)  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, D.C. 20460

EPA Reg. Number:

7969-81

Date of Issuance:

OCT 20 2009

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Name of Pesticide Product:

Pyramin DF Herbicide

Name and Address of Registrant (include ZIP Code):

BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is reregistered in accordance with FIFRA section 4(g)(2)(C) provided you:

1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
2. Make all the following changes to the product label:
  - a. Due to the importance of resistance management to a long-term pest-management strategy, it is suggested that resistance management grouping symbols and statements be included prominently on the front panel of the labeling.
  - b. Include the EPA Establishment Number and Net Contents on the front panel.
  - c. Under PPE, add the text "Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart."
  - d. Revise the phrase in the PPE section to read "If no such instructions for washables exist".
  - e. Revise the sentence in the User Safety Recommendations box to read "Remove clothing/PPE immediately if pesticide gets inside."

Continued on Page 2

Signature of Approving Official:

Jim Tompkins  
Product Manager 25  
Herbicide Branch  
Registration Division (7505P)

Date:

OCT 20 2009

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- f. Revise the sentence in the Environmental Hazards and Restrictions and Limitations sections to read "Do not contaminate water when disposing of equipment washwaters or rinsate."
- g. It is advised that the Storage and Disposal section be placed in a box for prominence.
- h. Revise the Storage and Disposal statement to read "Do not contaminate water, food, or feed by storage **and** ~~or~~ disposal."
- i. Revise the Pesticide Disposal sentence to read "Wastes resulting from this product **must** ~~may~~ be disposed of on site or at an approved waste disposal facility."
- j. Revise the headings from "General Information" to "Product Information", and from "General Tank Mixing Information" to "Tank Mixing Information".
- k. Revise the sentence under Application Instructions to read "Always follow the label **instructions** ~~recommendations~~ that fit your area and cultural system."
- l. Revise the statement under Application Instructions, Restrictions and Limitations, and Crop-Specific Information sections from "Do not apply Pyramin DF through any type of irrigation equipment, including chemigation." to "Do not apply this product through any type of irrigation system."
- m. On page 4, revise the phrase to read "Example: ...the amount **specified** ~~recommended~~ for broadcast application follows:"
- n. On page 5, revise the phrase to read "Add components...for each pint of **specified** ~~recommended~~ label rate per acre."

A stamped copy of your label is enclosed for your records. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after twelve (12) months from the date of this notice must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Enclosure



The Chemical Company

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# Pyramin® DF herbicide

**For weed control in sugar beets and red table beets**

**Active Ingredient:**

Pyrazon\* (5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone)..... 65.0%

**Other Ingredients:**..... with CORRECTS

**Total:**..... In EPA 100.0% dated

\*Pyrazon ANSI equals chloridazon BSI *et al.*

ACCEPTED  
OCT 20 2009

EPA Reg. No. 7969-81

EPA Est. No. 7969-81  
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION/PRECAUCIÓN**

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.)

See inside for complete **First Aid, Precautionary Statements, Directions For Use,** and **Conditions of Sale and Warranty,** and state-specific crop and/or use site restrictions.

**In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).**

**Net Contents:**

4  
12

<b>FIRST AID</b>	
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• <b>DO NOT</b> induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• <b>DO NOT</b> give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>• Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
<p>Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).</p>	

### Precautionary Statements

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing dusts or spray mists. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing.

#### Personal Protective Equipment (PPE)

##### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant (**Category A**) gloves
- Shoes plus socks

Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them. Follow the manufacturer's instructions for cleaning and 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.

**IMPORTANT:** When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

### User Safety Recommendations

#### Users should:

- 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.
- 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

**DO NOT** apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. **DO NOT** contaminate water when disposing of equipment washwaters. **DO NOT** contaminate water used for irrigation or domestic purposes.

Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

Pyrazon is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

#### Spray Drift

**DO NOT** apply this product in a manner that allows spray to drift and cause adverse effects to humans, animals or other nontarget sites. Applicators should evaluate conditions existing at the time of application and make appropriate adjustments to reduce drift. Additional information may be available from state enforcement agencies or the cooperative extension on the application of this product.

### Endangered Species Concerns

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

### Directions For Use

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

All applicable directions, restrictions and precautions are to be followed. This labeling must be in the user's possession during application.

#### 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**.

**Exception:** If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter treated areas if there will be no contact with anything that has been treated.

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

### Storage and Disposal

**DO NOT** contaminate water, food, or feed by storage or disposal.

**Pesticide Storage: DO NOT** store near fertilizers, seeds, insecticides, or fungicides. **DO NOT** store below 40° F. Store in a dry place away from heat or open flame.

**Pesticide Disposal:** Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER DISPOSAL

(for paper or plastic bags)

**Nonrefillable Container. DO NOT reuse or refill this container.** After completely emptying container into application equipment, dispose of empty bag in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Nonrefillable Container. DO NOT reuse or refill this container.** Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

**Triple rinse containers small enough to shake (capacity ≤ 50 pounds) as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

**Pressure rinse as follows:** Empty the remaining contents into application equipment or mix tank. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

### In Case of Emergency

In case of large-scale spillage regarding this product, call:  
CHEMTREC 1-800-424-9300  
BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

- Your local doctor for immediate treatment.
- Your local poison control center (hospital).
- BASF Corporation 1-800-832-HELP (4357).

### Steps to be taken in case material is released or spilled:

Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal. Remove contaminated clothing, and wash affected skin areas with soap and water. Wash clothing before reuse. Keep the spill out of all sewers and open bodies of water.

## General Information

Among the weeds controlled by **Pyramin® DF herbicide** are fanweed, henbit, lambsquarters, mustard, nettleleaf goosefoot, nightshade (black and hairy), pigweed, purslane, ragweed, shepherdspurse, smartweed, and velvetleaf (Michigan and Ohio only).

**Pyramin DF** will not provide acceptable control of annual grasses. Where grasses are a serious problem, follow the directions on this label for grass control with specific combinations featuring **Pyramin DF**, or use a subsequent post-emergence herbicide treatment such as **Poast® herbicide**.

### Crop Tolerance

All listed crops are tolerant to **Pyramin DF** at all stages of growth.

### Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions and by triple rinsing the equipment before and after applying this product.

### Resistance Management

**Pyramin DF** contains pyrazon, a **Group 5** herbicide. Any weed population may contain or develop plants naturally resistant to **Pyramin DF** and other **Group 5** herbicides. Weed species with acquired resistance to **Group 5** may eventually dominate the weed population if **Group 5** herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in reduction of control of those species by **Pyramin DF** or other **Group 5** herbicides.

The following recommendations may be considered in order to avoid or delay the development of herbicide resistance:

- **DO NOT** exceed the total number of sequential applications and the total number of applications per season of **Pyramin DF**.
- Avoiding the consecutive use of **Pyramin DF** or other target site of action **Group 5** herbicides that have a similar target site of action, on the same weed species.
- Using tank mixtures of **Pyramin DF** with herbicides from different target site of action groups as long as the involved products are all registered for the same use, have different sites of action, and are effective at the tank mix rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive IPM program.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.
- For further information or to report suspected resistance, you may contact BASF Corporation at the toll free number 1-800-832-HELP (4357)

## Application Instructions

The correct application method for **Pyramin DF** varies depending on area and cultural practices. Always follow the label recommendations that fit your area and cultural system.

**Pyramin DF** can be applied preemergence or post-emergence by broadcast or band treatments. For preemergence applications, spray immediately after beet seeds are planted and before beets and weeds emerge.

For postemergence applications of **Pyramin DF** to extend residual soil activity, treat after beets have 2 expanded true leaves (**DO NOT** count cotyledon leaves).

**Rate:** Apply 4.6 to 5.4 pounds of **Pyramin DF** per acre according to soil texture and organic matter content. Apply postemergence only if conditions are favorable for crop and weed growth. Use the lower rate on sandy loam soils with less than 3% organic matter. When used postemergence to the crop, **Pyramin DF** can extend preemergence weed control. Refer to section **Crop-specific Information** for more details.

### Irrigation

**Pyramin DF** requires moisture to control weeds effectively. In addition, it may be necessary to irrigate before treatment to ensure active weed growth. However, **DO NOT** apply **Pyramin DF** through any type of irrigation equipment, including chemigation. Refer to section **Crop-specific Information** for detailed instructions.

### Ground Application (Banding)

**Application Equipment:** Using planter-mounted band sprayers ensures that all planted beets are treated, that the band is centered over the row, and that the band width and rate of chemical are uniform.

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

**Example:** To spray a 7" band over beets in rows 28" apart, the amount recommended for broadcast application follows:

$$4.6 \text{ lbs/acre} \times 1/4 \text{ of area banded} = 1.2 \text{ lbs/banded acre.}$$

**Table 1. Banded Application Rates**

Band and Row Width	Pyramin DF Rate Per Banded Acre Based on Broadcast Rate Per Acre of:	
	4.6 pounds	5.4 pounds
6" band on 24" rows	1.2 pounds	1.4 pounds
7" band on 22" rows	1.5 pounds	1.7 pounds
7" band on 28" rows	1.2 pounds	1.4 pounds
10" band on 22" rows	2.1 pounds	2.5 pounds
10" band on 28" rows	1.6 pounds	1.9 pounds
10" band on 30" rows	1.5 pounds	1.8 pounds
12" band on 24" rows	2.3 pounds	2.7 pounds
30" band on double rows on 30" beds on 40" centers — California only.	3.4 pounds	4.0 pounds

## Ground Application Methods and Equipment (Broadcast)

**Water Volume:** Use 20 to 40 gallons of spray solution per broadcast acre for optimal performance or proportionately less for band applications.

**Spray Pressure:** Use 30 to 60 psi (measured at the boom, not at the pump or in the line).

**Application Equipment:** Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20" apart.

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### Additives

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No additives or adjuvants are necessary with **Pyramin® DF herbicide**.

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### General Tank Mixing Information

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#### Tank Mix Partners/Components

The following products may be tank mixed with **Pyramin DF** according to the specific tank mixing instructions in this label and respective product labels.

- **Betamix®\***
- **Betanex®\***
- **Nortron® SC**

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Pyramin DF** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. BASF does not recommend using tank mixes other than those listed on BASF labeling.

See section **Crop-specific Information** for more details.

Read and follow the applicable **Restrictions and Limitations** and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes. Before mixing components, always perform a compatibility jar test.

\***Pyramin DF** tank mixes with **Betamix** or **Betanex** are not for use in California.

#### Compatibility Test for Mix Components

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust rates accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the **Mixing Order** using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its

label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

#### Mixing Order

- 1) **Water.** Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- 3) **Products in PVA bags.** Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) **Water-dispersible products** (such as **Pyramin DF**, dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).  
  
If an inductor is used, rinse it thoroughly after the component has been added.
- 5) **Water-soluble products.** If an inductor is used, rinse it thoroughly after the component has been added.
- 6) **Emulsifiable concentrates** (such as oil concentrate when applicable). If an inductor is used, rinse it thoroughly after the component has been added.
- 7) **Water-soluble additives** (such as AMS or UAN when applicable). If an inductor is used, rinse it thoroughly after the component has been added.
- 8) **Remaining quantity of water.**

Maintain constant agitation during application.

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### Restrictions and Limitations

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- **Maximum seasonal use rate:** Refer to **Table 2. Crop-specific Restrictions and Limitations** for crop-specific seasonal use rates.
- **Restricted Entry Interval (REI): 12 hours.**
- **DO NOT** plant other crops in the band treated with **Pyramin DF** during the same season if the beet crop is lost due to climatic or soil conditions. If fields are replanted with sugar beets, reseed into the treated band. **DO NOT** use **Pyramin DF** again as a preemergence treatment on replanted beets because crop injury may result.
- The following rotational crops may be planted 1 year after the last application of pyrazon: Beans, Corn, Soybeans, and Wheat
- **Stress: DO NOT** apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- **DO NOT** apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications, because this injury may be enhanced or prolonged.
- **DO NOT** use **Pyramin DF** as a preemergence treatment on muck and peat.
- **DO NOT** use this product on **soils** classified as sands or loamy sands because this may result in crop injury.

- **DO NOT** use on **soils** with organic matter concentrations higher than 5%, except in the Red River Valley (see special section) or less than 2.5% in Michigan and Ohio for velvetleaf control (see special section) as unsatisfactory weed control or crop injury may result.
- **DO NOT** use **Pyramin® DF herbicide** as a broadcast treatment in dry irrigated regions including California.
- **DO NOT** make **spot treatments** in addition to broadcast or band treatments.
- **Rainfast period: Pyramin DF** is rainfast **6 hours** after application.
- **DO NOT** mix or apply **Pyramin DF** with any other pesticide or with any fertilizer except as specifically recommended on this label or approved supplemental labeling.
- **DO NOT** apply this product through any type of irrigation equipment, including chemigation.
- **DO NOT** use the same spray equipment for other purposes unless thoroughly cleaned. **DO NOT** contaminate water when disposing of equipment wastewaters.
- It is not the intent of BASF that **Pyramin DF** be used to formulate or reformulate any other pesticide product.

**Table 2. Crop-specific Restrictions and Limitations**

Crop	Minimum Time from Application to Harvest (PHI)	Maximum Rate Per Acre Per Application (lbs)	Maximum Rate Per Acre Per Season (lbs)	Livestock Grazing or Feeding
Red Table Beets	0 days	11.25*	11.25	n/a
Sugar Beets	0 days	11.25*	11.25	n/a

\* **DO NOT** exceed maximum seasonal use rate.

**Crop-specific Information**

**Red Table Beets**

**Pyramin DF** may be used both preemergence and post-emergence in the same season provided the combined rates do not exceed 11.25 pounds per acre.

**Preemergence Application**

Apply 4.6 to 5.4 pounds of **Pyramin DF** per acre after beet seeds are planted but before beets and weeds emerge. Use the lower rate on sandy loam soils. If rain does not fall within 10 days after treatment, irrigate the field to activate **Pyramin DF**. If irrigation is not possible, use a shallow cultivation before weeds are 2" tall.

**Early postemergence Application**

Apply 5.4 pounds of **Pyramin DF** for early postemergence application. Apply **Pyramin DF** after beets have 2 expanded true leaves and before any weeds have more than 2 true leaves.

**Sugar Beets**

Refer to section **Application Instructions**. Two applications of **Pyramin DF** can be used in Central and Eastern States only. The correct application method for **Pyramin DF** varies depending on area and cultural practices. Always follow label recommendations that fit your area and cultural system.

**(All States)**

Use 4.6 pounds of **Pyramin DF** per acre on low organic matter (less than 3%) and sandy loam soils unless otherwise instructed. Apply 5.4 pounds of **Pyramin DF** per acre on loams, silt loams, and clays unless otherwise instructed.

**Preplant Incorporated and Preemergence Applications**

• **Central and Eastern States (MI, MN, ND, and OH) - Preemergence Use Without Irrigation:** Apply 4.6 to 5.4 pounds of **Pyramin DF** per acre. Use the lower rate on sandy loam soils. Spray immediately after beet seeds are planted and before beets and weeds emerge. Where dry weather follows application and weeds emerge, use a shallow cultivation before weeds are 2" tall. Otherwise, **DO NOT** disturb or cover the treated band.

• **Minnesota and North Dakota - Special Instructions For Soils With Organic Matter of 5% to 7%:** Apply 11.25 pounds of **Pyramin DF** per acre as a single pre-emergence application to control common lambsquarters, prostrate pigweed, redroot pigweed, and wild mustard in Red River Valley soils containing 5% to 7% organic matter.

**DO NOT** follow with a postemergence treatment of **Pyramin DF**.

**DO NOT** use the 11.25 pounds rate on soils with organic matter higher than 7% or less than 5% because this may result in unsatisfactory weed control or crop injury, respectively. Where dry weather follows application, refer to **Preemergence Use Without Irrigation**.

• **Michigan and Ohio - Special Instructions For Preemergence Velvetleaf Control**

For preemergence velvetleaf control, apply 8.9 pounds of **Pyramin DF** per acre as a single preemergence application. Spray immediately after beet seeds are planted and before beets and weeds emerge.

**DO NOT** use the 8.9 pounds rate on soils with higher than 5% or less than 2.5% organic matter as this may cause unsatisfactory weed control or crop injury, respectively.

If dry weather follows application, refer to Irrigation in section **Application Instructions**.

• **Plains, Mountain, and Western States (CA, CO, ID, KS, MT, NE, OR, TX, UT, WA, and WY) - Fall-planted Sugar Beets (California Only)**

To reduce the potential for sugar beet injury or stand reduction, irrigate the field before planting and **DO NOT** apply **Pyramin DF** until temperatures in the fall average below 90°F. Replanting may be necessary if this treatment is not applied under these conditions.



## Preemergence Use (Sprinkler Irrigation)

**DO NOT** apply **Pyramin® DF herbicide** through irrigation equipment.

Prepare the seedbed and pre-irrigate to field capacity of soil. Plant seed 0.75 to 1" deep. Apply **Pyramin DF** as a pre-emergence banded surface application.

**DO NOT** incorporate **Pyramin DF** where sprinkler irrigation is used, as crop injury may result. **DO NOT** use broadcast treatments.

Apply **Pyramin DF** within 3 days after planting. Follow the directions for banded treatments and adjust application rates accordingly (see **Table 1. Banded Application Rates**).

Follow with no more than 0.75" of sprinkler water per irrigation set before beets and weeds emerge, as greater amounts may cause beet injury. Repeat irrigation as needed to get good beet emergence, however, **DO NOT** exceed 0.75" of sprinkler water per irrigation set until beets have 2 true leaves. **DO NOT** count cotyledonary leaves (the first two leaves to appear).

## Preplant Incorporation (Furrow Irrigation)

**DO NOT** apply **Pyramin DF** through irrigation equipment.

On fields that will receive furrow irrigation, prepare the seedbed or form beds for planting. Follow the directions for banded treatments and adjust application rates accordingly (see **Table 1. Banded Application Rates**).

Incorporate **Pyramin DF** no more than 2" deep using a rotary type tiller. Plant beets and furrow irrigate (see **Irrigation**). 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 beets have developed 2 true leaves. **DO NOT** count cotyledonary leaves.

To ensure planting into treated bands, do the following in one tractor operation:

- 1) spray **Pyramin DF**
- 2) incorporate
- 3) plant beets

Treat a band 1" to 2" wider than the tiller head used. **DO NOT** incorporate **Pyramin DF** with a disk as unsatisfactory weed control and sugar beet injury may result.

Increased temporary sugar beet injury has been observed where postemergence treatments of **Pyramin DF** have followed preplant applications of **Tillam®** or **Ro-Neet® herbicides**.

Refer to **General Tank Mixing Information** for more information.

## Sugar Beet Tank Mixes

### Pyramin DF + Betamix® or Betanex®

(Not for use in California)

This tank mix provides residual as well as quick postemergence broad spectrum weed control of pigweed, kochia,

wild buckwheat, lambsquarters, smartweed, mustard, nightshade (black and hairy), ragweed, and green and yellow foxtails.

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

**DO NOT** add additional surfactants to the tank mix.

**DO NOT** apply in more than 30 gallons of water per acre.

### Pyramin DF + Nortron® SC herbicide

To control additional weeds on the **Nortron SC** label, tank mix with **Pyramin DF**. Use this tank mix under conditions where **Nortron SC** is recommended. Before using this tank mix, read the label for **Nortron SC** for additional information and precautions.

### Winter-grown Sugar Beets in California

Use this tank mix in fields where wild oats and volunteer cereals are expected to be a problem. Under sprinkler irrigation or where natural rainfall is adequate, apply this tank mix preemergence. Refer to **Table 3. Tank Mix Application Rates of Pyramin® DF herbicide + Nortron® SC (California Only)** and **Table 4. Special Tank Mix Application Rates of Pyramin® DF + Nortron® SC (Idaho and Montana only)** for application rates and other information. See **Preemergence Use With Sprinkler Irrigation** for directions and precautions regarding application of sprinkler irrigation. Where furrow irrigation is to be used, apply this tank mix preplant incorporated. See **Irrigation** in section **Application Instructions** for directions and precautions regarding application.

### Sugar Beets in Idaho and Montana

Refer to **Table 4. Special Tank Mix Application Rates of Pyramin DF + Nortron SC (Idaho and Montana only)** for recommended rates. Use this tank mix only under all the following conditions:

- The sugar beets are sprinkler irrigated.
- The tank mix is applied to silt loam or finer textured soils (use higher rates in finer textured soils).
- The tank mix is applied preemergence.
- The products are incorporated by applying 0.5" of water within 7 days after application.
- The tank mix is followed with suitable postemergence chemicals to control later germinating weeds as needed.
- Minimal crop injury can be tolerated.

### Sugar Beets in All Other States

Refer to the tank mix partners' labels for recommended use rates.

Apply the tank mix at the time of planting or shortly after, but before weed germination.

**DO NOT** mechanically incorporate the tank mix as crop injury may result.

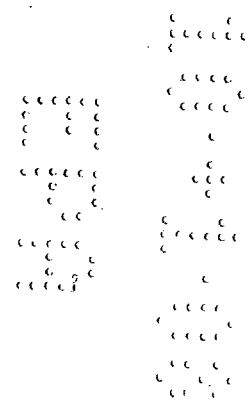
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**Table 3. Tank Mix Application Rates of Pyramin® DF herbicide + Nortron® SC herbicide (California Only)**

Soil Texture	Pyramin DF Rate Per Acre		Nortron SC <sup>1</sup> Rate Per Acre	
	Broadcast (for calibration purposes only)	10" Band Width <sup>2</sup> 30" row	Broadcast (for calibration purposes only)	10" Band Width <sup>2</sup> 30" row
<b>Coarse-textured Soils:</b> Sands, loamy sands, and sandy loams	<b>Not Recommended</b>			
<b>Medium-textured Soils:</b> Loams, silt loams, clay loams that contain less than 3% organic matter	4.6 pounds	1.52 pounds	3.0 pints	1.0 pint
<b>Fine-textured Soils:</b> Clay loams that contain more than 3% organic mat- ter and clays	4.6 pounds	1.52 pounds	3.75 pints	1.25 pints
<sup>1</sup> Nortron SC (4.0 pounds of active ingredient per gallon). <sup>2</sup> For other band or row widths, adjust rates in proportion to the area actually treated. <b>DO NOT</b> apply this mix broadcast.				

**Table 4. Special Tank Mix Application Rates of Pyramin DF + Nortron SC (Idaho and Montana only)**

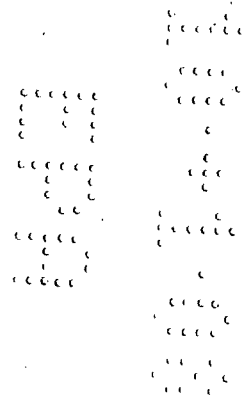
Soil Texture	Pyramin DF Rate Per Acre		Nortron SC <sup>1</sup> Rate Per Acre	
	Broadcast (for calibration purposes only)	7" Band Width <sup>2</sup> 22" row	Broadcast (for calibration purposes only)	7" Band Width <sup>2</sup> 22" row
<b>Coarse-textured Soils:</b> Sands, loamy sands, and sandy loams	<b>Not Recommended</b>			
<b>Medium-textured Soils:</b> Loams, silt loams, clay loams that contain less than 3% organic matter	2.3 to 3.6 pounds	0.73 to 1.14 pounds	1.5 to 3.0 pints	0.5 to 1.0 pint
When kochia, Russian this- tle, or grasses are problem weeds, follow these rates:	1.5 to 2.3 pounds	0.5 to 0.73 pound	3.0 to 4.5 pints	1.0 to 1.5 pints
<sup>1</sup> Nortron SC (4.0 pounds of active ingredient per gallon). <sup>2</sup> For other band or row widths, adjust rates in proportion to the area actually treated. <b>DO NOT</b> apply this mix broadcast.				



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<b>Crops</b>
This product can be used on the following crops:
<b>Red Table Beets</b> <b>Sugar Beets</b>
Look inside for complete <b>Restrictions and Limitations</b> and <b>Application Instructions</b> .

<b>Pests listed in this label:</b>	
<b>Common Name</b>	<b>Scientific Name</b>
Fanweed	<i>Thlaspi arvense</i>
Goosefoot, Nettleleaf	<i>Chenopodium murale</i>
Henbit	<i>Lamium amplexicaule</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Nightshade (black and hairy)	<i>Solanum</i> spp.
Pigweed	<i>Amaranthus</i> spp.
Purslane, Common	<i>Portulaca oleracea</i>
Ragweed	<i>Ambrosia</i> spp.
Shepherdspurse	<i>Capsella bursa-pastoris</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Thistle, Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Wild Mustard	<i>Sinapsis arvensis</i>



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### Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently 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 use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

To the extent consistent with applicable law, BASF makes no other express or implied warranty of fitness or merchantability or any other express or implied warranty.

To the extent consistent with applicable law, Buyer's exclusive remedy and BASF's exclusive liability, whether in contract, tort, negligence, strict liability, or otherwise, shall be limited to repayment of the purchase price of the product.

To the extent consistent with applicable law, BASF and the Seller disclaim any liability for consequential, special or indirect damages resulting from the use or handling of this product.

BASF and the Seller offer this product, and the Buyer and User accept it, subject to the foregoing **Conditions of Sale and Warranty** which may be varied only by agreement in writing signed by a duly authorized representative of BASF.

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