

7969-81

10/16/2008

1/12



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

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

Khalid H. Akkari, Ph.D.  
Product Registration Manager  
BASF Corporation  
Agricultural Products  
P.O. Box 13528  
Research Triangle Park, NC 27709-3528

OCT 16 2008

**SUBJECT:** Application for Pesticide Notification – Proposed Final Printed Label Notification with Revisions per EPA Letter Dated September 15, 2003  
Pyramin® DF Herbicide  
EPA Reg. No. 7969-81  
Application Dated October 3, 2007

Dear Dr. Akkari:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10. PLEASE NOTE: final printed labels must be submitted to the appropriate Product Manager (PM), not as a Notification under PRN 98-10. Therefore, the “proposed” label submitted for the above product was reviewed as a Notification under PRN 98-10, not as final printed label which must still be submitted to the appropriate PM.

However, the Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The labels submitted with the applications have been stamped “Notification” and will be placed in our records..

If you have any questions, please call me directly at 703-305-6249 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

A handwritten signature in black ink, appearing to be "Linda Arrington".

Linda Arrington  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs

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United States  
**Environmental Protection Agency**  
 Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number

**Application for Pesticide - Section I**

1. Company/Product Number File Symbol 7969-81	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Pyramin DF Herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) BASF Corporation, Agricultural Products P.O. Box 13528 Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

**COPY**

**NOTIFICATION**

**OCT 16 2008**

**Section - II**

Amendment - Explain below.  Final printed labels in response to Agency letter dated September 15, 2003

Resubmission in response to Agency letter dated \_\_\_\_\_  "Me Too" Application.

Notification - Explain below.  Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Notification of Pyramin® DF herbicide (EPA Reg. No. 7969-81) per PR Notice 98-10. This is a notification to the EPA for the Pyramin DF final printed labeling containing the revisions requested by the EPA in letter dated September 15, 2003. The details of the changes are listed in the enclosed cover letter.

This is not a PRIA action, therefore no PRIA code or fee are proposed.  
 E-Mail: khalid.akkari@basf.com

**Section - III**

1. Material This Product Will Be Packaged In:

Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container	If "Yes" Package wgt. No. per container

3. Location of Net Contents Information  
 Label  Container

4. Size(s) Retail Container  
10 Lbs

5. Location of Label Directions  
 on labeling adhered to bag

6. Manner in Which Label is Affixed to Product  
 Lithograph Paper glued Stenciled  Other \_\_\_\_\_

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Khalid H. Akkari	Title Product Registration Manager	Telephone No. (Include Area Code) (919) 547-2970
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**Certification**

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature <i>K.H. Akkari</i>	3. Title Product Registration Manager	6. Date Application Received (Stamped)
4. Typed Name Khalid H. Akkari	5. Date October 3, 2007	



The Chemical Company

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COPY

Helping Make  
Products Better™

October 3, 2007

Document Processing Deck (NOTIFICATION)  
Office of Pesticide Programs (7504P)  
U. S. Environmental Protection Agency  
Registration Support Branch  
Registration Division  
One Potomac Yard (South Building)  
2777 South Crystal Drive  
Document Processing Desk, Room S-4900  
Arlington, VA 22202

**ATTN: Mr. James A. Tompkins - (PM 25)**

**SUBJECT: Notification of Final Printed Labeling per PR Notice 98-10**

**Reference: Pyramin® DF herbicide, EPA Reg. No. 7969-81**

Dear Mr. Tompkins:

This letter conveys submission of the final printed labeling for **Pyramin DF herbicide**, EPA Reg. No. 7969-81 in accordance with PR Notice 98-10. This label has only been revised to include statements required by the EPA and specified in the enclosed letter dated September 15, 2003, as follows:

1. Under Agricultural Requirements change "waterproof gloves to "Chemical resistant gloves made of any waterproof material."
2. Under STORAGE AND DISPOASAL, move "Do not store near fertilizers, seeds, insecticides, or fungicides." to under Pesticide Storage.

No other changes have been made to the label text.

**"This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under section 12 and 14 of FIFRA."**



The Chemical Company

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The following are enclosed:

- (1) EPA Form 8570-1 "Application for Pesticide"
- (2) Three (3) copies of the final printed labeling for Pyramin® DF herbicide
- (3) Copy of EPA Letter and stamped Pyramin DF label dated September 15, 2003

If you have any questions or need further information, I can be reached by phone at 919-547-2976, or via e-mail at [khalid.akkarik@basf.com](mailto:khalid.akkarik@basf.com).

Sincerely,  
BASF Corporation  
The Chemical Company

A handwritten signature in black ink that reads "K.H. Akkari".

Khalid H. Akkari, Ph.D.  
NAFTA Registration Manager  
Regulatory Affairs.

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# BASF

NOTIFICATION  
OCT 16 2008

# Pyramin<sup>®</sup> DF

herbicide

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

<b>Active ingredient</b>	
Pyrazon* (5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone).....	65.0%
<b>Inert ingredients</b> .....	35.0%
<b>Total</b> .....	100.0%

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

EPA Registration Number 7969-81

EPA Establishment Number

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

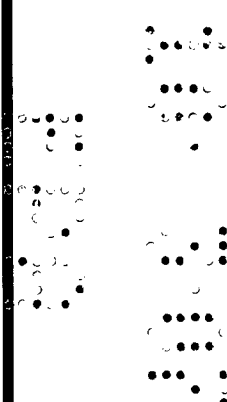
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See inside booklet for complete **First Aid, Precautionary Statements, Directions For Use, and Conditions of Sale and Warranty.**

**Made in Germany**

**Net contents:**

BASF Corporation  
26 Davis Drive, Research Triangle Park, NC 27709



## FIRST AID

<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Do not 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>• Do not 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 15-20 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 15-20 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>

## HOT LINE NUMBER

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).

## 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 re-use 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 break-down.

## 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.

### 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 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:

- **Plastic Containers:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.
- **Bags:** Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

### In Case of Emergency

In case of large-scale spillage regarding this product, call:

CHEMTREC	800-424-9300
BASF Corporation	800-832-HELP

In case of medical emergency regarding this product, call:

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

### 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 re-use. Keep the spill out of all sewers and open bodies of water.

## I. 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 postemergence 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.

## II. 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 pre-emergence or postemergence by broadcast or band treatments. For pre-emergence 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 4.6-5.4 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 pre-emergence weed control. Refer to section **VI. 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. Refer to section **VI. 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 herbicide** 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 pounds/acre X 1/4 of area banded = 1.2 pounds/ 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 20-40 gallons of spray solution per broadcast acre for optimal performance or proportionately less for band applications.

**Spray Pressure:** Use 30-60 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.

**III. Additives**

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

**IV. General Tank Mixing Information**

**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 **VI. 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.



### V. Restrictions and Limitations

- **Maximum seasonal use rate:** Refer to **Table 2** for crop-specific seasonal use rates.
- **Restricted Entry Interval (REI): 12 hours.**
- Do not plant other crops in the band treated with **Pyramin® DF herbicide** 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 pre-emergence treatment on replanted beets because crop injury may result.
- **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 pre-emergence 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** 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 through any type of irrigation equipment.
- Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate water when disposing of equipment wastewaters.
- This product cannot 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	Maximum Rate Per Acre Per Season	Livestock Grazing or Feeding
Red Table Beets	0 days	11.25 pounds*	11.25 pounds	n/a
Sugar Beets	0 days	11.25 pounds*	11.25 pounds	n/a

\* Do not exceed maximum seasonal use rate.

## VI. Crop-Specific Information

### Red Table Beets

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

#### **PRE-EMERGENCE APPLICATION**

Apply 4.6-5.4 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 II. **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 PRE-EMERGENCE APPLICATIONS**

• **Central and Eastern States (MI, MN, ND, and OH)**  
**Pre-emergence Use Without Irrigation:** Apply 4.6-5.4 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 5-7%:** 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 5-7% 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 **Pre-emergence Use Without Irrigation**.

#### • **Michigan and Ohio** **Special Instructions For Pre-emergence Velvetleaf Control**

For pre-emergence velvetleaf control, apply 8.9 pounds of **Pyramin DF** per acre as a single pre-emergence 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 II. **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.

#### **PRE-EMERGENCE USE WITH SPRINKLER IRRIGATION**

Prepare the seedbed and pre-irrigate to field capacity of soil. Plant seed 0.75-1" 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 WITH FURROW IRRIGATION**

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 1-2" 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 herbicide** have followed preplant applications of **Tillam®** or **Ro-Neet® herbicides**. Refer to **IV. 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**

To control additional weeds on the **Nortron SC** label, tank mix with **Pyramin DF**. Use this tank mix under conditions where **Nortron® SC herbicide** 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 pre-emergence. Refer to **Tables 3 and 4** for application rates and other information. See **Pre-emergence 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 II. **Application Instructions** for directions and precautions regarding application.

**Sugar Beets in Idaho and Montana**

Refer to **Table 4** 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 pre-emergence.
- 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.

**Table 3. Tank Mix Application Rates of Pyramin DF herbicide + Nortron SC (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 matter 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. Do not 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	2.3-3.6 pounds	0.73-1.14 pounds	1.5-3.0 pints	0.5-1.0 pint
When kochia, Russian thistle, or grasses are problem weeds, follow these rates:	1.5-2.3 pounds	0.5-0.73 pound	3.0-4.5 pints	1.0-1.5 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. Do not apply this mix broadcast.

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### Crops

This product can be used on the following crops:

**Red Table Beets**  
**Sugar Beets**

Look inside for complete **Restrictions and Limitations** and **Application Instructions**.

### Pests listed in this label:

Common Name	Scientific Name
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>

### 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 should be followed carefully. However, it is impossible to eliminate all risks inherently associated with 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. 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. BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. IN NO CASE SHALL BASF OR THE SELLER BE LIABLE 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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BASF Corporation  
26 Davis Drive  
Research Triangle Park, NC 27709

# BASF