

BASF

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ACCEPTED
JUN 28 1995
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 7969-108

Pyramin[®] SC

herbicide

Herbicide

For weed control in sugar beets and red table beets

A liquid suspension concentrate (sc) formulation containing:

Active ingredients*	44.36%
Pyrazon(5-amino-4-chloro-2-phenyl-3(2H)-pyridazinone)	42.6%
Related aminochloro and dichlorophenyl pyridazinones	1.76%
Inert ingredients	55.64%
Total	100.0%

*Equivalent to 4.51 pounds per gallon of pyrazon and related aminochloro and dichlorophenyl pyridazinones. Pyrazon ANSI equals chloridazon BSI et al.

EPA Reg. No. 7969-108

KEEP OUT OF REACH OF CHILDREN.

CAUTION

Precautionary Statements:
Harmful if swallowed

Statement of practical treatment

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.
If on skin: Wash with plenty of soap and water. Get medical attention if irritation persists. Remove contaminated clothing.
If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching the back of the throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

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

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the **Directions For Use** for information about this standard.

Net Contents: 2.5 gallons

Made in Germany

BASF Corporation
P.O. Box 13528, Research Triangle Park, NC, 27709

Specimen Label

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Precautionary Statements HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
Personal Protective Equipment (PPE): Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart. Wash thoroughly with soap and water after handling.

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride, or viton
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control

Statements: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations
User 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.

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.

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 such as barrier laminate, butyl rubber, nitrile rubber, or neoprene rubber
- Shoes plus socks

Storage and Disposal

Storage: Do not store near fertilizers, seeds, insecticides, or fungicides. Do not contaminate water, food, or feed by storage or disposal.

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

Triple-rinse container (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.

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:

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

General Information

Among the weeds controlled by Pyramin[®] SC herbicide are lamb-quarters, pigweed, ragweed, shepherdspurse, fanweed, purslane, nightshade (black and hairy), mustard, henbit, smartweed, nettleleaf goosefoot, and velvetleaf (Michigan and Ohio only).

Pyramin SC will not provide acceptable control of annual grasses. Where grasses are a serious problem, follow the directions on this label to control grasses with specific tank mixes featuring Pyramin SC or use a subsequent postemergent herbicide treatment. The correct application method for Pyramin SC varies depending on area and cultural practices. Always follow the label recommendations that fit your area and cultural system.

See **Mixing Directions and Restrictions and Limitations.**

Mixing Directions

Use 20-40 gallons of water per acre broadcast basis, or proportionately less for banded applications. Fill sprayer 3/4 full with clean water. While agitating with a mechanical bypass agitator, add the required amount of Pyramin SC. Continue agitation while adding water to fill tank to required volume. Continue agitating during spraying. Mix only the amount of spray solution that will be used immediately.

Pyramin® SC herbicide + Other Products When tank mixing, each product should be added separately, following the instructions given for the mixing order. For estimating suitability of mixes refer to Jar Test for Estimating Suitability of Mixes.

Jar Test for Estimating Suitability of Mixes

1. **Water Supply:** Use only water from the intended source and at the source temperature.
2. **Amount of Water in Jar:** For 20 gallons per acre spray volume, (broadcast basis) use 4 cups (946 ml) of water. For 30 gallons per acre spray volume, (broadcast basis) use 6 cups (1420 ml) of water. For other spray volumes, adjust proportionately to above.
3. **Amount of Herbicide to add:** Add 1 teaspoon of Pyramin SC for each pint of recommended label rate. Add other liquid herbicide(s) at the same rate. For dry herbicides, add 2 leveled teaspoons for each pound of recommended label rate.
4. **Add components in the following sequence, gently mixing between component additions:**
 - 1) Dry products.
 - 2) Water miscible products, liquid flowables, Pyramin® SC herbicide.
 - 3) Emulsifiable concentrates (such as Nortron® SC herbicide) when applicable.
 - 4) Add remaining 1/4 volume of water to jar.
5. **Cap jar, invert 10 cycles, let stand for 15 minutes, evaluate.**

6. **Evaluation:** An ideal tank mix will be uniform; thus, the suitability of the mixture is questionable if any of the following are observed:

- Surface layer film or globules incorporated in the mixture.
- Flocculation - fine particles which may be suspended in the liquid or found as a precipitated layer at the bottom of the jar.
- If particles settle to the bottom of the jar, inverting the jar several times will indicate if settled particles can be resuspended for spraying.
- Clabbering - thickening texture (coagulated) resembling yogurt or a curd-like texture as with cottage cheese.

Restrictions and Limitations

Do not use this product on soils classified as sands or loamy sands because this may result in crop injury.

Do not use Pyramin SC as a pre-emergence treatment on muck and peat.

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 SC as a broadcast treatment in dry irrigated regions including California.

Do not mix or apply Pyramin SC with any other pesticide or with any fertilizer except as specifically recommended on this label or approved supplemental labeling.

Do not plant other crops in the band treated with Pyramin SC 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 SC again as a preemergence treatment on replanted beets because crop injury may result.

Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate water when disposing of equipment wastewaters.

Do not store near fertilizers, seeds, insecticides, or fungicides.

Always follow the Restrictions and Limitations for all products used in a tank mix. The most restrictive labeling applies in tank mixes.

Do not apply this product through any type of irrigation system.

Band Treatment

When spraying a band over the row, the amount of Pyramin SC 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 recommended for broadcast application follows:

$$2.75 \text{ qts/A} \times \frac{1}{4} \text{ of acre banded} = 0.69 \text{ qts/banded acre.}$$

Refer to Table 1. 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.

Table 1. Banded Application Rates

Band and Row Width	Quarts of Pyramin® SC Per Banded Acre For Broadcast Rate of:	
	2.75 Quarts Per Acre	3.25 Quarts Per Acre
6-inch band on 24-inch rows	0.69	0.81
7-inch band on 22-inch rows	0.88	1.03
7-inch band on 28-inch rows	0.69	0.81
10-inch band on 22-inch rows	1.25	1.48
10-inch band on 28-inch rows	1.00	1.16
10-inch band on 30-inch rows	0.92	1.08
12-inch band on 24-inch rows	1.38	1.63
30-inch band on double rows on 30 inch beds with beds on 40-inch centers — California only.	2.06	2.44

Sugar Beets

Two applications of Pyramin® SC herbicide can be used in Central and Eastern states only. Do not apply more than 6.75 quarts per acre per season.

Preplant Incorporated and Preemergence Applications of Pyramin SC

Central and Eastern States (MI, MN, ND, and OH)

General Information

Preemergence Use Without Irrigation: Apply 2.75-3.25 quarts of Pyramin SC per acre in enough water (20-40 gallons per acre) for good coverage. 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 inches 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 6.75 quarts of Pyramin SC per acre as a single preemergence application to control common lambsquarters, prostrate pigweed, redroot pigweed, and wild mustard in Red River Valley soils containing 5-7% organic matter. Spray after beet seeds are planted and before beets and weeds emerge. Do not follow with a postemergence treatment of Pyramin SC.

Do not use the 6.75 quarts 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 5.33 quarts of Pyramin SC herbicide per acre as a single preemergence application. Spray immediately after beet seeds are planted and before beets and weeds emerge.

Do not use the 5.33 quarts rate on soils with organic matter higher than 5% or less than 2.5% because this may result in unsatisfactory weed control or crop injury, respectively.

Where dry weather follows application, refer to **Preemergence Use Without Irrigation**.

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 before planting and do not apply Pyramin SC until temperatures in the fall average below 90° F. Replanting may be necessary if this treatment is not applied under these conditions.

Preemergence Use With Sprinkler Irrigation

Prepare the seedbed and pre-irrigate to field capacity of soil. Plant seed 0.75-1 inch deep. Apply Pyramin SC as a preemergence banded surface application. Do not incorporate Pyramin SC where sprinkler irrigation is used, as crop injury may result. Do not use broadcast treatments.

Apply Pyramin SC within 3 days after planting. Use 2.75 quarts per acre on low organic matter (less than 3%) loam soils or 3.25 quarts per acre on loam and clay soils. Follow the directions for banded treatments (see **Band Treatment and Table 1**) and adjust application rates accordingly.

Follow with no more than 0.75 inch 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 inch 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

Use the following planting procedure on fields that will receive furrow irrigation. Prepare the seedbed or form beds for planting. Apply and incorporate Pyramin SC at 2.75 quarts per acre on low organic matter (less than 3%) and sandy loam soils. Apply 3.25 quarts of Pyramin SC per acre on loams, silt loams, and clays. Follow the directions for banded treatments (see section titled **Band Treatment**) and adjust application rates accordingly. Incorporate Pyramin SC no more than 2 inches deep using a rotary type tiller. Plant beets and furrow irrigate. Irrigate until tops of beds are thoroughly wetted. Pyramin SC requires moisture to control weeds effectively.

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 SC
- (2) incorporate, and
- (3) plant beets.

Treat a band 1-2 inches wider than the tiller head used. Do not incorporate Pyramin SC with a disk as unsatisfactory weed control and sugar beet injury may result.

**Tank Mixes for Sugar Beets
Pyramin® SC herbicide +
Nortron® SC Herbicides for
Winter-grown Sugar Beets in
California**

A tank mix of Pyramin SC + Nortron SC at rates listed in Table 2 is recommended in fields where wild oats and volunteer cereals are expected to be a problem.

Mixing Directions

When mixing, add Pyramin SC slowly to three-quarters of the spray volume of water. Agitate spray solution thoroughly, and then add Nortron SC. Agitate while filling to final spray volume and during spraying.

Application

Under sprinkler irrigation or where natural rainfall is adequate, apply this tank mix preemergence. 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 **Preplant Incorporation With Furrow Irrigation** for directions and precautions regarding application. Use this mixture under conditions where Nortron SC is recommended. Before use, read the label for Nortron SC for additional information and precautions.

**Pyramin SC + Nortron® SC
Herbicides for Sugar Beets in
Idaho and Montana**

The recommended rates for Pyramin SC + Nortron SC tank mix are listed in Table 3. This tank mix is only recommended 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 half an inch of water within 5-7 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

**Pyramin SC for Postemergence
Application in Sugar Beets
(All States)**

Timing

Timing is very important for successful treatments. Treat after beets have 2 expanded true leaves (do not count cotyledon leaves) and before any weeds have more than 2-4 true leaves. Treating larger weeds will not be effective. When used postemergence to the crop, Pyramin SC can extend preemergence weed control.

Soil Moisture

Good soil moisture before treatment is necessary. If the soil is dry, irrigation is recommended before application. For optimum performance, a postemergence application should be followed with moisture. Where furrow irrigation is possible, irrigate shortly after application to the point that the bed surface has reached maximum water-holding capacity. If sprinkler irrigation is used, do not apply more than 0.75 inch of water on the first irrigation set after herbicide application.

Application

Postemergence applications can follow preemergence use provided that a total of 6.75 quarts of Pyramin SC per acre per season of Pyramin SC is not exceeded. Do not apply Pyramin SC if weeds are stressed by lack of moisture, excessive heat, high winds, frost or temperature, as insufficient weed control may result. Apply postemergence only if conditions are favorable for crop and weed growth. **Note:** Increased temporary sugar beet injury has been observed when postemergence treatments of Pyramin SC has followed preplant applications of Tillam® or Ro-Neet® herbicides.

Table 2. Tank Mix of Pyramin SC + Nortron SC (California Only)

Soil Texture	Pyramin SC Per Acre		Nortron SC ² Per Acre	
	Broadcast (for calibration purposes only)	10-inch Band Width ¹ 30-inch row	Broadcast (for calibration purposes only)	10-inch Band Width ¹ 30-inch row
Coarse Textured Soils: Sands, loamy sands, and sandy loams	Not Recommended			
Medium Textured Soils: Loams, silt loams, clay loams that contain less than 3% organic matter	2.75 quarts	0.92 quarts	3.0 pints	1.0 pints
Fine Textured Soils: Clay loams that contain more than 3% organic matter and clays	2.75 quarts	0.92 quarts	3.75 pints	1.25 pints

¹ For other band or row widths, adjust rates in proportion to the area actually treated. Do not apply this mixture broadcast.
² Nortron SC (4.0 pounds active ingredient per gallon).

Table 3. Tank Mix of Pyramin® SC herbicide + Nortron® SC herbicide for Idaho and Montana only

Soil Texture	Pyramin SC Per Acre		Nortron SC ¹ Per Acre	
	Broadcast (for calibration purposes only)	7-inch Band Width ² 22-inch row	Broadcast (for calibration purposes only)	7-inch Band Width ² 22-inch row
Coarse Textured Soils: Sands, loamy sands, and sandy loams	Not Recommended			
Medium Textured Soils: Loams, silt loams, clay loams that contain less than 3% organic matter	2.8-5 pints	0.55-0.9 pint	1.5-3.0 pints	0.5-1.0 pint
When kochia, Russian thistle, or grasses are problem weeds, follow these rates:	2-3.2 pints	0.64-1 pint	3.0-4.5 pints	1.0-1.5 pints

¹ Nortron SC (4.0 pounds active ingredient per gallon).
² For other band or row widths, adjust rates in proportion to the area actually treated. Do not apply this mixture broadcast.

Adjuvants for Postemergence Application in Sugar Beets
Pyramin SC + Oil Concentrate
 Adding a nonphytotoxic emulsifiable concentrate to Pyramin SC may improve broadleaf weed control and allow greater timing flexibility for successful applications relative to size of weeds. Apply 2.75-3.25 quarts of Pyramin SC per acre according to soil type and organic matter content with 1 quart of oil concentrate per acre (broadcast basis). Use sufficient spray solution for good coverage (20-100 gallons per acre treated).
 Add Pyramin SC first to 3/4 the spray volume of water and mix thoroughly in the spray tank. Then add the oil concentrate with the agitator running. Finally, fill the tank with water to required volume.
 Do not use oil when maximum temperatures are expected to exceed 85° F within 5 days of applying as excessive crop injury may result. For specific directions for using an oil concentrate with Pyramin SC in your locality, and for recommended brands of oil to use, consult your local sugar company field representative or BASF representative.

Pyramin SC + Betamix® or Betanex® Herbicides
 (Not intended for use in California)
 This tank mix can be used for broad spectrum weed control including pigweed, kochia, wild buckwheat, lambsquarters, smartweed, mustard, nightshade (black and hairy), ragweed, and green and yellow fox-tails. This combination provides residual as well as quick postemergence weed control. Follow the directions on the respective product labels. The most restrictive labeling applies in all tank mixes. Add the Betamix or Betanex to the half-full spray tank after the Pyramin SC is adequately suspended. Do not add additional surfactants to the mixture. Do not apply in more than 30 gallons of water per acre.

Pyramin SC for Red Table Beets
Preemergence Application
 Apply 2.75-3.25 quarts per acre of Pyramin SC herbicide in enough water for thorough coverage. Use the lower rate on sandy loam soils. Spray after beet seeds are planted but before beets and weeds emerge.
 If rain does not fall within 10 days after treatment, beets should be irrigated to activate Pyramin SC. If irrigation is not possible, use a shallow cultivation before weeds are 2 inches tall.

Early Postemergence Application
 Apply 3.25 quarts of Pyramin SC for early postemergence application. Timing is very important for successful treatments. Apply after beets have 2 expanded true leaves and before any weeds have more than 4 true leaves, usually within 2 weeks after planting. Treating larger weeds will not be effective.
Note: Pyramin SC may be used both pre- and postemergence in the same season provided the combined rates do not exceed 6.5 quarts per acre. Follow the directions given on this label for each type of application.

The following are scientific names for the broadleaf weeds listed in this label.

Common Name	Scientific Name
Farweed	<i>Thlaspi arvense</i>
Henbit	<i>Lamium amplexicaule</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Goosefoot, Nettleleaf	<i>Chenopodium murale</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 pensylvanicum</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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