

# Pyramin<sup>®</sup> DF

**A herbicide for the control of annual weeds in sugar beet, fodder beet, red beet and mangels.**

A water dispersible granule containing 65% w/w chloridazon

**Risk and Safety Information**

**Warning:**

**Harmful if inhaled.**

**Harmful if swallowed.**

**May cause an allergic skin reaction.**

**Toxic to aquatic life with long lasting effects.**

Wear protective gloves.

Avoid breathing dust.

If on skin: wash with plenty of soap and water.

If skin irritation or rash occurs: get medical advice/attention.

Wash contaminated clothing before reuse.

Collect spillage.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.

**To avoid risks to human health and the environment, comply with the instructions for use.**

**5 kg**

**UN 3077**  
Environmentally hazardous  
substance, solid, N.O.S.  
(contains chloridazon)  
Marine Pollutant

PCS 04264



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## PRECAUTIONS

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND SUITABLE RESPIRATORY PROTECTIVE EQUIPMENT\* when handling the product. \*Disposable filtering facepiece respirator to at least EN149 FFP2 or equivalent.

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces. WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

IF SWALLOWED, seek medical advice immediately and show this container or label.

Do not contaminate water with the product or its container. (Do not clean application equipment near surface water /

Avoid contamination via drains from farmyards and roads).

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

EMPTY CONTAINER THOROUGHLY, and dispose of safely.

Keep dry and frostproof in a suitable pesticide store.





## DIRECTIONS FOR USE

**IMPORTANT:** This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Pyramin DF is a soil acting herbicide which controls germinating weeds by root absorption, during or shortly after weed emergence.

### 1. Restrictions/Warnings

For professional use only.

A maximum total dose of 2.6 kg chloridazon/hectare may only be applied every third year on the same field.

For optimum results the soil must be sufficiently moist at the time of application for the product to form an active herbicidal layer in the soil.

Adequate weed control depends upon sufficient rain falling before emergence to at least maintain this level of moisture.

Pyramin DF is suitable for use on all soil textural classes except ,coarse sand' ,sand' and ,fine sand' as defined in the Soil Texture (85) System and also excepting soils of high organic content, fen peat and moss soils. The soil type should be accurately diagnosed since the recommended rates of use of Pyramin DF applied pre drilling and pre emergence are dependent on soil type.

Pyramin DF is a selective beet herbicide which is safe to the crop and can be used at any seed spacing. Depressions in crop vigour (with or without a reduction in stand) may however occur if Pyramin DF is applied to crops suffering stress conditions such as those described below:

- When rapid increase in the transpiration rate of the beet causes a sudden increase in the rate of uptake of Pyramin DF as, for example, occurs when a sharp rise in temperature follows a period of low temperature, or a period of heavy rainfall.
- Where the crop is suffering from trace element deficiency, e.g. manganese.
- When the recommended rate is exceeded, particularly on sandy soils, or when conditions are not conducive to even distribution of Pyramin DF in the soil, such as inadequate soil moisture and poor tillth.
- When rates of nitrogen in excess of those generally recommended are applied immediately before drilling. Where higher rates of fertiliser are considered necessary these must be applied not less than three weeks before drilling.
- When the crop is retarded or damaged due to harrowing or excessive consolidation of the soil by the press wheel.
- When the crop is drilled at the incorrect depth.
- When conditions at emergence reduce seedling vigour (e.g. encrustation or „capping“ of the soil).
- Where there is heavy loading of seed dressing on individual seeds.
- Overdosing by overlapping should be avoided.

Heavy rain falling shortly after spraying may check the growth of the crop particularly when water has stood in surface depressions.

Under conditions of low pH, a reduction in herbicidal effectiveness may be noticed.

Wash sprayer thoroughly immediately after use, using clean water and following the sprayer cleaning guidance provided by the equipment manufacturer.

**Avoid spray drift on to neighbouring crops, particularly oilseed rape and lettuce.**





## 2. Weed Control

### Susceptibility of weeds to Pyramin DF

Weed Name	Pyramin DF
Black bindweed	S
Charlock	S
Chickweed, Common	S
Cleavers	MR
Dead nettle, Red	S
Fat hen	S
Fumitory, Common	MS
Groundsel	MS
Hemp nettle, Common	S
Knotgrass	S
Marigold, Corn	S
Mayweed spp.	S
Meadow grass, Annual	S
Nettle, Small	S
Nightshade, Black	S
Orache, Common	S
Pansy, Field	MR
Penny cress, Field	S
Pimpernel, Scarlet	MS
Poppy, Common	S
Radish, Wild	S
Redshank	S
Shepherd's purse	S
Sow thistle, Prickly	MS
Sow thistle, Smooth	MR
Speedwell, Common Field	S
Speedwell, Ivy leaved	S
Spurges	M
Spurrey, Corn	S
Vetches	MR
Wild oat	R

- S - Susceptible
- MS - Moderately Susceptible
- MR - Moderately Resistant
- R - Resistant

## 3. Crops and Application

### 3.1 Crops

Pyramin DF may be applied pre drilling and incorporated or pre emergence to sugar beet, fodder beet, red beet and mangels.





**3.2 Application Methods**

**3.2.1 Pre drilling and Incorporated Application.**

Application of Pyramin DF overall followed immediately by soil incorporation of the spray is particularly recommended to ensure good weed control in the following situations:

- where dry conditions prevail at the time of drilling
- where the crop is drilled late (after mid-April)

In these situations dry soil conditions or high temperatures may result in rapid weed establishment before the chemical reaches the root zone of the germinating weeds. Incorporation of Pyramin DF will enhance the herbicidal action where surface sprays may not give satisfactory weed control.

Time of Application

Apply Pyramin DF to the final seedbed before drilling. The spray must be applied overall and incorporated into the soil as soon as possible.

Rate of Application

When applying Pyramin DF pre-drilling, use a minimum water volume of 100 litres of water per hectare.

**Table 1: Rates of Application for both Pre-drilling/Incorporated and Pre emergence overall applications**

When variability in soil type occurs in one field, use the rate of Pyramin DF recommended for the lightest soil type present. This may result in poorer weed control on the areas of heavier soil type.

Textural Group <sup>a</sup>	Textural Class <sup>a</sup>	Rate of Pyramin DF - kg/hectare
Sands	Loamy coarse sand	1.7
Very light soils	Loamy sand Loamy fine sand	
	Light soils	Coarse sandy loam
Sandy loam Fine sandy loam		
Medium soils	Sandy silt loam Silt loam (85)	4
	Sandy clay loam Clay loam Silty clay loam	
Heavy soils	Sandy clay Clay Silty clay	Not recommended

<sup>a</sup> As defined in the Soil Texture (85) System.  
<sup>b</sup> 3.1 kg to be used only on the heavier soils in this category.





### Method of Application

Uniform incorporation into the top 25 mm layer of the final seedbed is essential using two harrowings at right angles to each other. Spring tine or zigzag harrows should be used with not more than 100 mm stagger set to penetrate to a maximum depth of 75 to 100 mm into the soil.

Choice of type and weight of harrow are dependent on soil texture. Harrows with broken, uneven or missing tines should not be used. Take particular care with spring tine harrows which tend to penetrate too deeply.

Incorporation deeper than 25 mm causes dilution of the herbicidal layer and may, therefore, result in inadequate weed control.

Beet should be drilled as quickly as possible after incorporation to achieve the best results.

### Notes

Dilution of the chemical may occur if high amounts of rainfall occur just after incorporation. In these circumstances, efficiency of the treatment may be reduced.

### 3.2.2 Pre-emergence Application

#### Time of Application

Apply Pyramin DF at the time of drilling or immediately afterwards on a seedbed which is fine, moist, firm and free from clods. Should spraying be delayed for any reason, application must be made as soon as possible whilst the soil is still moist and before any emergence of the beet. To obtain adequate weed control significant rainfall between application and crop emergence is essential to maintain soil moisture. If dry soil conditions or high temperatures are expected the incorporated pre-drilling application of Pyramin DF is recommended.

#### Rate of Application

See Table 1 above for overall rates of application and below for band spraying.

When applying Pyramin DF pre-emergence, use a minimum water volume of 100 litres of water per hectare.

#### Method of Application

Pyramin DF can be applied pre emergence either as an overall treatment or as a band spray.

#### Band Spraying

When band spraying, set up the band sprayer according to the manufacturer's instructions. Use the nozzle tips and pressures recommended and at the correct speed on a 180 mm band, the volume of water applied will be 240 litres per sprayed hectare.

For band application add the dose rate per hectare recommended for overall application (see Table 1) to 240 litres of water.

The area of crop treated based on a 180 mm band width varies with the crop row width as follows:





**Table 2:**

Crop area treated at 240 litres per sprayed hectare	
Row Width mm	Area Treated hectares
460	2.6
480	2.7
500	2.8
520	2.9
540	3.0
560	3.1
580	3.2
600	3.3

**Warning**

Excessive penetration of the drill couler may be accompanied by a narrowing of the sprayed band with a consequent increase in the rate of application.

Overdosing by overlapping should be avoided, though its effects may be minimised by spraying across the direction of drilling.

**Inter-Row Weed Control Following Band Spraying**

Continued weed control from Pyramin DF depends on leaving the treated soil undisturbed. Inter row hoeing, chopping out and singling operations should therefore be arranged to leave as much as possible of the Pyramin DF treated land intact.

**4. Following crops**

The effects of Pyramin DF persist in the soil for several weeks. Fields which have been sprayed but where the crop has failed may be re drilled with sugar beet, fodder beet, mangels or maize after cultivation. They should not be re drilled with any other crops.

Any spring sown crop may follow sugar beet, fodder beet or mangels harvested in the usual way. Winter cereals may be sown in the autumn after ploughing.

**5. Mixing and Spraying**

**5.1 Calibration of Spraying Machinery**

The spraying equipment should be clean and free from traces of other chemicals.

Ensure the correct nozzles are fitted:

- (a) For the correct water volume for overall sprayers.
- (b) For the correct drilling speed for band sprayers.

Check the delivery from each nozzle for uniformity and replace worn tips to ensure uniform output.

Calibrate the sprayer and use it according to the manufacturer's instructions.





Cross check the band sprayer calibration in the field as follows:

- (a) Select a nozzle on the sprayer giving the nearest output to the average and with the drill in operation collect the spray from this nozzle for a distance of 60 metres. This should be exactly 225 ml. As the spray is collected over a given distance, the quantity will be the same irrespective of the make of nozzles used and this is a volume rate of 240 litres per sprayed hectare on a 180 mm band.
- (b) Repeat as necessary, adjusting the tractor speed until this output is achieved over this distance.
- (c) Make sure that the observations are made when the band sprayer is working smoothly and not immediately on starting.

#### **Important**

- (d) The final setting of the width of the spray band to 180 mm must be made in the field when the drill is in operation and not on a hard surface or headland. It is essential that the band width is exactly 180 mm, otherwise the rate of application will be incorrect. A narrower band may cause crop damage and a wider band will result in poorer weed control. The setting should be checked in each field treated and also at the beginning of each day's work because of the possible effect of weather on soil conditions.

#### **5.2 Mixing**

Never prepare more spray solution than is required.

Three quarters fill the tank with clean water and start the agitation. Remove the top filter. SLOWLY add the required amount of Pyramin DF. Do not empty the contents into the tank as one large mass. Add the remainder of the water, replace the filter, and continue agitation until spraying is complete.

When tank mixes are to be used, take due note of any instructions given as to the order of mixing. Each product should be added separately to the spray tank and fully dispersed before the addition of any further product(s).

Rinse empty containers thoroughly, using an integrated pressure rinsing device or by manually rinsing three times. Add washings to tank at time of filling and dispose of container safely.

#### **5.3 Water Volume**

Use a minimum water volume of 100 litres per hectare, whether Pyramin DF is applied pre-drilling or pre-emergence.

Water volume for tank mixtures applied pre-emergence should not be less than 220 litres/hectare. Volumes up to 450 litres/hectare should be used when soil conditions are drier.

#### **5.4 Spray Quality**

Apply as a **MEDIUM** spray, as defined by BCPC.

#### **5.5 Tank Cleaning**

Wash sprayer thoroughly immediately after use, using clean water and following the sprayer cleaning guidance provided by the equipment manufacturer.

### **6. Trademark Acknowledgements**

Pyramin is a BASF registered trademark.

### **7. Compatibility**

For details of compatibilities contact your distributor, local BASF representative, the BASF Technical Services Hotline: 00 44 845 602 2553 or visit our website [www.agriCentre.basf.ie](http://www.agriCentre.basf.ie)





**The following does not form part of the product label under Plan Protection Products Regulation (EC) 1107/2009.**

With many products there is a general risk of resistance developing to the active ingredients. For this reason a change in activity cannot be ruled out. It is generally impossible to predict with certainty how resistance may develop because there are so many crop and use connected ways of influencing this. We therefore have to exclude liability for damage or loss attributable to any such resistance that may develop. To help minimise any loss in activity the BASF recommended rate should in all events be adhered to.

Numerous, particularly regional or regionally attributable, factors can influence the activity of the product. Examples include weather and soil conditions, crop plant varieties, crop rotation, treatment times, application amounts, admixture with other products, appearance of organisms resistant to active ingredients and spraying techniques. Under particular conditions a change in activity or damage to plants cannot be ruled out. The manufacturer or supplier is therefore unable to accept any liability in such circumstances. All goods supplied by us are of high grade and we believe them to be suitable, but as we cannot exercise control over their mixing or use or the weather conditions during and after application, which may affect the performance of the material, all conditions and warranties, statutory or otherwise, as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use; but nothing should be deemed to exclude or restrict any liability upon us which cannot be excluded or restricted under the provisions of any applicable law.



## Safety Data Sheet

To access the Safety Data Sheet for this product scan the QR code or use the weblink below:



[http://www.agricentre.basf.ie/go/Pyramin\\_DF\\_sds](http://www.agricentre.basf.ie/go/Pyramin_DF_sds)

Alternatively, contact your supplier.



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