

**CAUTION**  
**KEEP OUT OF REACH OF CHILDREN**  
**READ SAFETY DIRECTIONS BEFORE OPENING OR USING**

# **BASF Polyram® DF**

**FUNGICIDE SPRAY**  
**ACTIVE CONSTITUENT: 700 g/kg METIRAM**

**For the control of fungal diseases in apples, pears, grapevines, stone fruit and certain vegetable crops as per the DIRECTIONS FOR USE table.**

## **GENERAL INSTRUCTIONS**

### **FUNGICIDE RESISTANCE WARNING**

POLYRAM DF Fungicide Spray is a member of the multi-site activity group of fungicides. For fungicide resistance management POLYRAM DF is a Group Y fungicide.

Some naturally occurring fungal populations resistant to POLYRAM DF and other Group Y fungicides may exist through normal genetic variability in any fungal population. The resistant individuals can eventually dominate the fungi population if these fungicides are used repeatedly. These resistant fungi will not be controlled by POLYRAM DF and other Group Y fungicides, thus resulting in a reduction in efficacy and possible yield loss.

Since the occurrence of resistant fungi is difficult to detect prior to use BASF Australia Ltd accepts no liability for any losses that may result from the failure of POLYRAM DF to control resistant fungi.

### **EXPORT OF TREATED PRODUCE**

Growers should note that suitable MRLs or import tolerances may not be established in all markets for produce treated with POLYRAM DF Fungicide Spray. If you are growing produce for export, please check with BASF (1 800 635550) for the latest information on MRLs and import tolerances BEFORE using POLYRAM DF.

## **APPLICATION**

### **TREE AND VINE CROPS - Apples, pears, stone fruit, grapevines**

#### ***Dilute spraying***

- Use a sprayer designed to apply high volumes of water up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required water volume may be determined by applying different test volumes using different settings on the sprayer, from industry guidelines or expert advice.
- Add the amount of product specified in the Directions for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed as the crop grows.

#### ***Concentrate spraying***

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies water volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen water volume.
- Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The mixing rate for concentrate spraying can then be calculated in the following way:

#### **EXAMPLE ONLY**

Dilute spray volume as determined above:

For example 1500 L/ha

Your chosen concentrate spray volume:

For example 500 L/ha

The concentration factor in this example is:

$3 \times$  (i.e.  $1500 \text{ L} \div 500 \text{ L} = 3$ )

If the dilute label rate is 200 g/100 L, then the concentrate rate becomes  $3 \times 200$ , that is 600 g/ 100 L of concentrate spray.

- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying, users are advised to consult relevant industry guidelines, undertake appropriate competency training and follow industry Best Practices.

For concentrate application, use a spray volume of at least 200 litres per hectare.

## **ROW CROPS**

### ***High Volume (dilute spraying)***

Apply in sufficient water to thoroughly wet the crop to the point of run-off.

The water volume should increase as the crop size and bulk increases. Where a range of rates is specified, use the higher rate when disease pressure is high.

### ***Low Volume (concentrate spraying)***

Apply the specified rate per hectare in sufficient water to ensure thorough, even coverage of all plant parts. Where a range of rates is specified, use the higher rate when disease pressure is high.

## MIXING

Slowly pour the POLYRAM DF Fungicide Spray into the spray tank three-quarters filled with water, with the agitation system actively moving. Alternatively, pre-mix by adding to the POLYRAM DF Fungicide Spray a quantity of water of at least half the volume of the POLYRAM DF Fungicide Spray, and stir immediately. Add this mixture to the bulk of the water in the spray vat with agitation running.

## COMPATIBILITY

POLYRAM DF Fungicide Spray is compatible with most insecticides and fungicides. However, to be sure of compatibility with any particular product, check with your local dealer first.

## PRECAUTIONS

Grapevine leaves treated with POLYRAM DF Fungicide Spray must not be used for human consumption.

## RE-ENTRY PERIOD

Do NOT allow entry into treated areas until the spray deposits have dried. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length PVC gloves. Clothing must be laundered after each day's use.

For glasshouses and other confined areas, do not re-enter until spray deposits have dried and area has been thoroughly ventilated.

## PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Do NOT contaminate streams, rivers or waterways with this product or the used container.

## STORAGE AND DISPOSAL

Store in the closed, original container in a dry, cool, well-ventilated area out of direct sunlight. Shake empty bag into spray tank. Do NOT dispose of undiluted chemicals on-site. Puncture or shred and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should NOT be burnt.

## SAFETY DIRECTIONS

May irritate the eyes, nose, throat and skin. Avoid contact with eyes and skin. Do NOT inhale dust or spray mist. Wash hands after use.

## FIRST AID

If poisoning occurs contact a doctor or Poisons Information Centre. Telephone 131126 Australia-wide. Avoid giving alcohol.

## MATERIAL SAFETY DATA SHEET

Additional information is listed in the Material Safety Data Sheet.

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THIS PRODUCT IS NOT CONSIDERED TO BE A DANGEROUS GOOD UNDER THE AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD AND RAIL

FOR SPECIALIST ADVICE IN AN  
**EMERGENCY ONLY**  
**PHONE 1 800 033 111**  
TOLL FREE – ALL HOURS – AUSTRALIA-WIDE

BASF Australia Ltd

ABN 62 008 437 867

Norwest Business Park, 7 Maitland Place

Baulkham Hills NSW 2153

Customer Service Telephone:

1800 635 550

Customer Service Fax:

1800 630 005

Product Information Line:

1800 501 940

Fax On Demand:

0500 544 044

Website:

[www.agro.basf.com.au](http://www.agro.basf.com.au)

**DIRECTIONS FOR USE  
TREE AND VINE CROPS**

<b>RATE</b>					<b>CRITICAL COMMENTS</b>
In the following table, all rates are given for dilute spraying. For concentrate spraying, refer to the Application section.					
<b>CROP</b>	<b>DISEASE</b>	<b>STATE</b>	<b>RATE</b>	<b>WHP (days)</b>	
Apples	Black spot ( <i>Venturia inaequalis</i> )	All States	150 to 200 g/100 L	21	Apply by dilute or concentrate spraying equipment. Apply the same total amount of product to the target crop whether applying this product by dilute or concentrate spraying methods.  Apply after early copper sprays and repeat every 7 to 14 days or as recommended in local Department of Agriculture schedules. Use the higher rate and the shorter spray interval when weather conditions favour disease development. NOTE: POLYRAM DF Fungicide Spray is not compatible with integrated mite control programs (IMCP) using the predatory mite <i>Typhlodromus pyri</i> .
Grapevines	Black spot ( <i>Elsinoe ampelina</i> )	Vic, Tas, SA, WA only	200 g/100 L	14	Apply at bud burst as first spray only if carryover expected, then two weeks after bud burst or as disease pressure requires.
		Qld only			Apply at bud swell, bud burst and 10 to 14 days later.
	Downy mildew ( <i>Plasmopara viticola</i> )	All States (NOT ACT or NT)	150 to 200 g/100 L		The first spray should be applied when the shoots are 15 to 20 cm long and repeat applications should be made every 7 to 14 days, using the shorter interval when foliage expansion is rapid, and weather conditions favour disease development.
Pears	Black spot ( <i>Venturia pirina</i> )	All States	150 to 200 g/100 L	14	Apply after early copper sprays and repeat every 7 to 14 days or as recommended in local Department of Agriculture schedules. Use the higher rate and the shorter spray interval when weather conditions favour disease development.
Pears	Black spot ( <i>Venturia pirina</i> )	All States	150 to 200 g/100 L	14	Apply after early copper sprays and repeat every 7 to 14 days or as recommended in local Department of Agriculture schedules. Use the higher rate and the shorter spray interval when weather conditions favour disease development.
Stone fruit	Rust	All States	150 g/100 L	14	Apply at petal fall, shuck fall, then 4 weeks after shuck fall. For late varieties, apply a further spray in mid December. In WA only, apply the first spray at petal fall, the second spray 4 weeks later and the third spray a further 4 weeks later.
	Shothole				Apply the first spray at petal fall, followed by three further applications at 10 to 14 day intervals. In WA only, apply the first spray at pink bud, then petal fall, followed by three further applications at 10 to 14 day intervals.

**NON-TREE AND VINE CROPS**

CROP	DISEASE	STATE	RATE	WHP (days)	CRITICAL COMMENTS
Asparagus	Rust ( <i>Puccinia</i> spp.)	Qld, Vic, Tas, SA, WA only	<b>High Volume:</b> 200 to 300 g/100 L <b>Low Volume:</b> 2.2 to 3.5 kg/ha	7	Begin application when disease first becomes apparent, and repeat at 7 to 10 day intervals. Use the higher rate and the shorter spray interval when weather conditions favour disease development.
Beans	Rust ( <i>Uromyces appendiculatus</i> ), anthracnose ( <i>Colletotrichum lindemuthianum</i> )	All States	<b>High Volume:</b> 200 to 300 g/100 L <b>Low Volume:</b> 2.2 to 3.5 kg/ha	7	Begin application when disease first becomes apparent, and repeat at 7 to 10 day intervals. Use the higher rate and the shorter spray interval when weather conditions favour disease development.
Cabbages, cauliflowers, Brussels sprouts, broccoli	Downy mildew ( <i>Peronospora parasitica</i> )	All States	<b>High Volume:</b> 200 to 300 g/100 L <b>Low Volume:</b> 2.2 to 3.5 kg/ha	7	Begin application when disease first becomes apparent, and repeat at 7 to 10 day intervals. Add a non-ionic surfactant at label rates. Use the higher rate and the shorter spray interval when weather conditions favour disease development.
	Ring spot ( <i>Mycosphaerella brassicicola</i> )	Qld, Vic, Tas, SA, WA only			
Carrots	Early blight ( <i>Cercospora apii</i> ), late blight ( <i>Septoria apiicola</i> )	All States	<b>High Volume:</b> 200 g/100 L <b>Low Volume:</b> 2.2 kg/ha	7	Begin application when disease first becomes apparent, and repeat at 7 to 10 day intervals.
Celery	Cercospora leaf spot ( <i>Cercospora carotae</i> ), alternaria leaf spot ( <i>Alternaria</i> spp.)	Qld, NSW, Vic, Tas, WA only	<b>High Volume:</b> 200 g/100 L <b>Low Volume:</b> 2.2 kg/ha	2	Begin application when disease first becomes apparent and repeat at weekly intervals.
Cucumbers	Downy mildew ( <i>Pseudoperonospora cubensis</i> ), gummy stem blight ( <i>Didymella bryoniae</i> )	All States	<b>High Volume:</b> 200 g/100 L <b>Low Volume:</b> 2.2 kg/ha	2	Begin application when disease first becomes apparent, and repeat at weekly intervals. Spray both sides of leaves. Add a non-ionic surfactant at label rates.
Other cucurbits				7	
Lettuce	Downy mildew ( <i>Bremia lactucae</i> )	All States	<b>High Volume:</b> 200 g/100 L	7	Apply when disease symptoms first appear and then repeat at 7 to 10 day intervals.
	Septoria ( <i>Septoria lactucae</i> )	NSW, Vic, Tas, SA, WA only	<b>Low Volume:</b> 2.2 kg/ha		
Potatoes	Early blight (target spot, <i>Alternaria solani</i> ), late blight (Irish blight, <i>Phytophthora infestans</i> )	All States	<b>High Volume:</b> 150 to 200 g/100 L <b>Low Volume:</b> 1.7 to 2.5 kg/ha	7	Apply when disease symptoms first appear and then repeat every 7 to 10 days. Use the higher rate and the shorter spray interval when weather conditions favour disease development. If overhead irrigation is used apply immediately following irrigation.

**NON-TREE AND VINE CROPS – continued**

CROP	DISEASE	STATE	RATE	WHP (days)	CRITICAL COMMENTS
Tobacco	Blue mould ( <i>Peronospora hyoscyami</i> )	Qld, NSW, Vic, WA only	High Volume: 200 to 250 g/100 L	–	Apply as a complete cover spray at weekly intervals.
	Brown spot ( <i>Alternaria</i> spp.), frog-eye leaf spot ( <i>Cercospora nicotianae</i> )	Qld, WA only	Low Volume: 2.2 to 2.7 kg/ha		Apply when disease symptoms first appear and repeat every 7 to 10 days as required. Use the higher rate and the shorter spray interval during weather conditions favourable to disease development.
Tomatoes	Early blight (target spot, <i>Alternaria solani</i> ), septoria ( <i>Septoria lycopersici</i> )	All States	High Volume: 150 to 200 g/100 L  Low Volume: 1.7 to 2.2 kg/ha	2	Apply when disease symptoms first appear. Repeat every 7 to 10 days. Use the higher rate and the shorter spray interval during weather conditions favourable to disease development.
	Late blight (Irish blight, <i>Phytophthora infestans</i> )	All States (NOT ACT or NT)			

**NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION.**

**WITHHOLDING PERIODS (WHP):**

CELERY, CUCUMBERS AND TOMATOES:  
OTHER CUCURBITS AND OTHER VEGETABLES:  
PEARS, STONE FRUIT AND GRAPEVINES:  
APPLES:  
TOBACCO:

DO NOT HARVEST FOR 2 DAYS AFTER APPLICATION.  
DO NOT HARVEST FOR 7 DAYS AFTER APPLICATION.  
DO NOT HARVEST FOR 14 DAYS AFTER APPLICATION.  
DO NOT HARVEST FOR 21 DAYS AFTER APPLICATION.  
NOT REQUIRED WHEN USED AS DIRECTED.