

# Safety data sheet

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BASF Safety data sheet

Date / Revised: 18.12.2013

Version: 3.1

Product: **BASF POLYRAM DF FUNGICIDE SPRAY**

Classified as hazardous according to criteria of NOHSC

(30035208/SDS\_CPA\_AU/EN)

Date of print 19.12.2013

## 1. Substance/preparation and company identification

### **BASF POLYRAM DF FUNGICIDE SPRAY**

Use: crop protection product, fungicide

#### Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)

Level 12, 28 Freshwater Place Southbank

Victoria 3006, AUSTRALIA

Telephone: +61 3 8855-6600

Telefax number: +61 3 8855-6511

#### Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]

BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

## 2. Hazard identification

HAZARDOUS SUBSTANCE, DANGEROUS GOOD

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

May cause sensitization by skin contact.

Keep away from food, drink and animal feeding stuffs.

When using do not eat, drink or smoke.

Avoid contact with skin.

Keep out of the reach of children.

This material and its container must be disposed of in a safe way.

Wear suitable gloves.

If swallowed, seek medical advice immediately and show this container or label.

Use appropriate container to avoid environmental contamination.

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### 3. Composition/information on ingredients

#### Chemical nature

crop protection product, fungicide, water dispersible granules

#### Hazardous ingredients

Metiram

Content (W/W): 70 %  
CAS Number: 9006-42-2

methenamine

Content (W/W): < 5 %  
CAS Number: 100-97-0  
Hazard symbol(s): F, Xn  
R-phrases: 11, 42/43

The wording of the hazard symbols and R-phrases is specified in section 16 if dangerous ingredients are mentioned.

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### 4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

Suitable extinguishing media:

dry powder, foam, water spray

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Unsuitable extinguishing media for safety reasons:  
carbon dioxide

Specific hazards:  
carbon monoxide, hydrogen sulphide, carbon dioxide, nitrogen oxides, sulfur oxides  
The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:  
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## 6. Accidental Release Measures

Personal precautions:  
Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:  
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:  
For small amounts: Contain with dust binding material and dispose of.  
For large amounts: Sweep/shovel up.  
Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

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## 7. Handling and Storage

### Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:  
Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### Storage

Segregate from foods and animal feeds.  
Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

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Protect from temperatures above: 30 °C  
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## 8. Exposure controls and personal protection

### Components with occupational exposure limits

no exposure standard allocated

### Personal protective equipment

#### Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

#### Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

#### Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

## 9. Physical and Chemical Properties

Form:	granules
Colour:	brown
Odour:	moderate odour, smoky
pH value:	approx. 5 - 7 (CIPAC standard water D, 10 g/l, 20 °C)
Melting temperature:	approx. 156 °C
Boiling point:	The substance / product decomposes therefore not determined.

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Flash point:	not applicable	
Flammability:	not highly flammable	(Regulation 440/2008/EC, A.10)
Lower explosion limit:	150 g/m <sup>3</sup>	(VDI 2263)
Upper explosion limit:	For solids not relevant for classification and labelling.	
Self ignition:	not self-igniting	(Method: Regulation 440/2008/EC, A.16)
Explosion hazard:	not explosive	(Regulation 440/2008/EC, A.14)
Fire promoting properties:	not fire-propagating	(Regulation 440/2008/EC, A.17)
Vapour pressure:	The value has not be determined because of the high melting point.	
Density:	approx. 1.7 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Information on: metiram		
Partitioning coefficient n-octanol/water (log Pow):	1.76 (pH value: 7)	
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Viscosity, dynamic:	not applicable	

**Other Information:**

If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

**Conditions to avoid:**

See MSDS section 7 - Handling and storage.

Thermal decomposition:	150 °C, 20 kJ/kg (DSC (OECD 113))
Thermal decomposition:	235 °C, 20 kJ/kg (DSC (OECD 113))
Thermal decomposition:	325 °C, > 830 kJ/kg (DSC (OECD 113))

**Substances to avoid:**

strong bases, strong acids, strong oxidizing agents

**Hazardous reactions:**

No hazardous reactions if stored and handled as prescribed/indicated.

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Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

LD50 rat (oral): &gt; 5,000 mg/kg (OECD Guideline 401)

LC50 rat (by inhalation): &gt; 2.71 mg/l 4 h (OECD Guideline 403)

No mortality was observed. An aerosol was tested.

LD50 rat (dermal): &gt; 2,000 mg/kg (OECD Guideline 402)

No mortality was observed.

### Irritation

Assessment of irritating effects:

Not irritating to the eyes. Not irritating to the skin.

Primary skin irritation rabbit: non-irritant (OECD Guideline 404)

Primary irritations of the mucous membrane rabbit: non-irritant (OECD Guideline 405)

### Sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

modified Buehler test guinea pig: sensitizing (OECD Guideline 406)

### Repeated dose toxicity

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: metiram

Assessment of repeated dose toxicity:

Repeated oral exposure may affect certain organs.  
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### Genetic toxicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

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## Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

## Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

## Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

## Other relevant toxicity information

Misuse can be harmful to health.

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## 12. Ecological Information

### Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Toxicity to fish:

LC50 (96 h) 0.473 mg/l, *Oncorhynchus mykiss* (OPP 72-1 (EPA-Guideline), Flow through.)

No observed effect concentration (28 d) 0.0236 mg/l, *Oncorhynchus mykiss* (EPA 72-1, Flow through.)

Aquatic invertebrates:

EC50 (48 h) 0.821 mg/l, *Daphnia magna* (Directive 79/831/EEC, semistatic)

Aquatic plants:

EC50 (72 h) 0.157 mg/l (growth rate), algae (OECD Guideline 201, static)

No observed effect concentration (72 h) 0.002 mg/l (growth rate), algae (OECD Guideline 201)

### Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components.

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Information on: metiram

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: metiram

Assessment biodegradation and elimination (H<sub>2</sub>O):

According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

### **Bioaccumulation potential**

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: metiram

Bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## **13. Disposal Considerations**

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## **14. Transport Information**

### **Domestic transport:**

Hazard class:	9
Packing group:	III
ID number:	UN 3077
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.



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(contains METIRAM)

**Further information**

Hazchem Code:2Z  
 IERG Number:47

**Sea transport**

IMDG

Hazard class:	9
Packing group:	III
ID number:	UN 3077
Hazard label:	9, EHSM
Marine pollutant:	YES
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains METIRAM)

**Air transport**

IATA/ICAO

Hazard class:	9
Packing group:	III
ID number:	UN 3077
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains METIRAM)

**Further information**

Environmentally Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subjected to the Australian Dangerous Goods Code when transported by road or rail in packagings not exceeding 500 Kg or 500 L.

**15. Regulatory Information****Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) (Australia):**

Poisons Schedule: Drugs &amp; Poisons, Schedule 5

Hazard symbol(s)

Xi	Irritant.
N	Dangerous for the environment.

R-phrase(s)

R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R43	May cause sensitization by skin contact.

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S-phrase(s)	
S13	Keep away from food, drink and animal feeding stuffs.
S20/21	When using do not eat, drink or smoke.
S24	Avoid contact with skin.
S2	Keep out of the reach of children.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S46	If swallowed, seek medical advice immediately and show this container or label.
S57	Use appropriate container to avoid environmental contamination.

**Hazard determining component(s) for labelling: METIRAM****Other regulations**

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

**Registration status:**

AICS, AU                          blocked / not listed  
APVMA 30467

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**16. Other Information**

Full text of hazard symbols and R-phrases if mentioned as hazardous components in section 3:

F	Highly flammable.
Xn	Harmful.
11	Highly flammable.
42/43	May cause sensitization by inhalation and skin contact.

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Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.