

Safety data sheet

BASF Safety Data Sheet
Date / Revised: 24.07.2014
Product: **POLYRAM® DF**

(ID no. 30266153/SDS_CPA_EU/EN; Version 5.0; 24.07.2014)

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

POLYRAM® DF

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide.

Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited
Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022
P.O. Box 407, Auckland 1140
Phone: + 64 9 255 4300
Fax: + 64 9 255 4307
E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800764 766

BASF Emergency Advice Number: 0800 944 955 (24 Hour Advice in an Emergency Only)

2. Hazards Identification

Hazard Classification:

6.1E, 6.3B, 6.4A, 6.5A, 6.5B, 6.9B, 9.1A, 9.3C



Priority Identifier:

WARNING. Keep out of reach of children

Secondary Identifiers:

- 6.1E HARMFUL. May be harmful if swallowed, inhaled or absorbed through the skin
6.3B May cause mild skin irritation
6.4A May cause eye irritation
6.5A May cause respiratory sensitisation
6.5B May cause sensitisation from prolonged skin contact
6.9B May cause organ damage through prolonged or repeated oral exposure at high doses.
9.1A VERY TOXIC TO AQUATIC ORGANISMS. May cause long-term adverse effects in the aquatic environment. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent aquatic sites.
9.3C HARMFUL TO TERRESTRIAL VERTEBRATES.

To avoid risks to human health and the environment, comply with the instructions for use.
Hazard determining component(s) for labelling: METIRAM.

3. Composition/Information on Ingredients

Mixtures

Chemical nature

Crop protection product, herbicide, water dispersible granules (WG).

Hazardous ingredients

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

4. First-Aid Measures

4.1 Description of first aid measures

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.

4.2. Most important symptoms and effects, both acute and delayed

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.

4.3. Indication of any immediate medical attention and special treatment needed

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

5. Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray, foam, dry powder.

Unsuitable extinguishing media for safety reasons:
Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Carbon monoxide, hydrogen sulphide, carbon dioxide, nitrogen oxides, sulphur oxides.
The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

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

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning 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 labelled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and Storage

7.1 Precautions for safe 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.

APPROVED HANDLER:

Approved handlers are not required for this product except during use.

This product must be under the control of an APPROVED HANDLER if it is being applied in a wide dispersive manner or used by a commercial contractor. Refer to the product label for handling precautions and directions for use.

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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.

7.2 Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

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.

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.						
Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	100 kg	1 kg	100 kg	100 kg
* Note: Farms \geq 4 ha are exempt but with controls						
DO NOT STORE OR LOAD WITH: Class 1 Explosive			SEGREGATE FROM: Foodstuffs and Food Containers			
Segregation: In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.						

RECORD KEEPING

Records of use must be kept if more than 3 kg is applied within 24 hrs.

NOTE: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

No occupational exposure limits known.

8.2 Exposure controls

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

9.1 Information on basic physical and chemical properties

Form:	granules
Colour:	brown
Odour:	moderate odour, smoky
Odour threshold:	Not determined due to potential health hazard by inhalation.
pH value:	approx. 5 – 7 (CIPAC standard water D, 10 g/l, 20 °C)
Melting temperature:	approx. 156 °C
	The data given are those of the active ingredient.
Boiling point:	The substance / product decomposes therefore not determined.
Flash point:	not applicable
Evaporation rate:	not applicable
Flammability:	not highly flammable (Regulation 440/2008/EC, A.10)
Lower explosion limit:	150 g/m ³ (VDI 2263)
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Vapour pressure:	The value has not be determined because of the high melting point.
Relative vapour density (air):	not applicable
Solubility in water:	dispersible

Information on: metiram

Partitioning coefficient n-octanol/water (log K_{ow}): 0.33 (pH value: 7)
 1.9 (pH value: 5)
 -0.37 (pH value: 9)

Self ignition:	not self-igniting (Method: Regulation 440/2008/EC, A.16)
Thermal decomposition:	150 °C, 20 kJ/kg (DSC (OECD 113)) 235 °C, 20 kJ/kg (DSC (OECD 113)) 325 °C, > 830 kJ/kg (DSC (OECD 113)) No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	not applicable, the product is a solid
Explosion hazard:	not explosive (Regulation 440/2008/EC, A.14)
Fire promoting properties:	not fire-propagating (Regulation 440/2008/EC, A.17)

9.2 Other information

Other Information:

Bulk density: approx. 603 kg/m³ (20 °C).

10. Stability and Reactivity

10.1 Reactivity

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

10.2 Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

See SDS section 7 - Handling and storage.

10.5 Incompatible materials

Substances to avoid:

Strong acids, strong bases, strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition products:

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

11. Toxicological Information

11.1 Information on toxicological effects

Assessment of acute toxicity:

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

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg (OECD Guideline 401)

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

No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 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.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Experimental/calculated data:

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

Germ cell mutagenicity

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.

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.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

12.1 Toxicity

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.)

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)

12.2 Persistence and degradability

Assessment biodegradation and elimination (H₂O):

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 (H₂O):

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

12.3 Bioaccumulative 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.

12.4 Mobility in soil

Assessment transport between environmental compartments:

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

Information on: metiram

Assessment transport between environmental compartments:

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

12.5 Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6 Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.7 Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Container:

Empty bag completely into the spray tank. Burn empty bag in a suitable incinerator if circumstances, especially wind direction, permit. Otherwise crush and bury in suitable landfill.

Contaminated packaging:

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

Product:

Dispose of this product only by using according to the label or at an approved landfill or at an approved facility. Do NOT burn product. Do NOT contaminate water with product or used container.

13.1. Waste treatment methods

Waste product/package may be sent to a suitable incineration plant, observing local regulations.

14. Transport Information

Commercial transport:
Classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

UN number:	UN 3077
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains METIRAM)
Transport hazard class(es):	9, EHSM
Packing group:	III
Marine pollutant:	YES
HAZCHEM:	2[Z]

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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)

15.2 Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR000482.
See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, Nos. P2062.
See www.foodsafety.govt.nz/acvm for registration conditions.

16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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 products 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.

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