

# Safety data sheet

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BASF Safety data sheet

Date / Revised: 15.05.2023 Version: 1.0

Product: **Polyram® DF** 

(30266153/SDS\_CPA\_TH/EN)

Date of print: 10.10.2023

# 1. Substance/preparation and manufacturer/supplier identification

# **Product name:**

Polyram® DF

Use: crop protection product, fungicide

Manufacturer/supplier:
BASF New Zealand Ltd.
5E City Works Depot
77 Cook Street
Auckland Central, Auckland 1010
NEW ZEALAND

Telephone: +64 9 255-4300 Telefax number: +64 9 255-4307

**Emergency information:** 

International emergency number: Telephone: +49 180 2273-112

#### 2. Hazard identification

## Classification according to UN GHS 2009

Classification of the substance and mixture:

Skin sensitization: Cat.1

Specific target organ toxicity — repeated exposure (Skeletal muscle): Cat.2

Hazardous to the aquatic environment - acute: Cat.1 Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:

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# Signal Word: Warning

Hazard Statement:

H317 May cause an allergic skin reaction.

H373 May cause damage to organs (Skeletal muscle) through prolonged or

repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statement:** 

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

Precautionary Statements (Prevention):

P280 Wear protective gloves. P260 Do not breathe dust.

P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P391 Collect spillage.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

# 3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

crop protection product, fungicide, water dispersible granules

#### **Hazardous ingredients**

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metiram

Content (W/W): 70 % Skin Sens.: Cat. 1

CAS Number: 9006-42-2 STOT RE (Skeletal muscle): Cat. 2

Aquatic Acute: Cat. 1 Aquatic Chronic: Cat. 1

Sodium diisobutylnaphthalenesulphonate

Content (W/W): < 5 % Acute Tox.: Cat. 4 (Inhalation - dust)
CAS Number: 27213-90-7 Acute Tox.: Cat. 4 (oral)

Acute Tox.: Cat. 4 (oral) Eye Dam./Irrit.: Cat. 1

STOT SE: Cat. 3 (irr. to respiratory syst.)

Aquatic Acute: Cat. 3 Aquatic Chronic: Cat. 3

Lignosulfonic acid, sodium salt

Content (W/W): < 30 % CAS Number: 8061-51-6

glucose

Content (W/W): < 3 % CAS Number: 50-99-7

sodium sulphate

Content (W/W): < 3 % CAS Number: 7757-82-6

## 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: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

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

## 5. Fire-Fighting Measures

Suitable extinguishing media: dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons: carbon dioxide

#### Specific hazards:

carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, sulfur oxides, silica compounds, halogenated compounds, organometallic compounds

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.

#### 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. Wear suitable protective equipment.

## 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.

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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.

#### Storage

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.

## 8. Exposure controls and personal protection

#### Components with occupational exposure limits

No substance specific occupational exposure limits known.

#### Personal protective equipment

#### Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

#### Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

#### 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: solid
Colour: light brown
Odour: mild, spicy

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Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 4.5 - 6.5

(CIPAC standard water D, 1 %(m),

23 °C)

Melting temperature: approx. 156 °C

The values mentioned are those of

the active ingredient.

Boiling point:

The product has not been tested.

Flash point:

not applicable, the product is a solid

**Evaporation rate:** 

not applicable

Flammability (solid/gas): not highly flammable

Lower explosion limit: 150 g/m3

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.

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

235 °C , 20 kJ/kg (DSC (OECD 113))

(VDI 2263)

 $325 \, ^{\circ}\text{C}$  , >  $830 \, \text{kJ/kg}$  (DSC (OECD 113))

Not a substance liable to selfdecomposition according to UN transport regulations, class 4.1.

Self ignition: not self-igniting

Self heating ability: It is not a substance capable of

spontaneous heating.

SADT: > 75 °C Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Vapour pressure:

The value has not be determined because of the high melting point.

Bulk density: approx. 603 kg/m3

(20 °C)

Relative vapour density (air):

not applicable

Solubility in water: dispersible

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Partitioning coefficient n-octanol/water (log Pow):

The statements are based on the properties of the individual

components.

Information on: metiram

Partitioning coefficient n-octanol/water (log Pow): 0.33

(pH value: 7)

1.9

(pH value: 5) -0.37

(pH value: 9)

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Viscosity, dynamic:

not applicable, the product is a solid

# 10. Stability and Reactivity

Conditions to avoid:

See SDS 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))

Thermal decomposition: Not a substance liable to self-decomposition according to

UN transport regulations, class 4.1.

Substances to avoid:

strong bases, strong acids, strong oxidizing agents

Hazardous reactions:

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

Hazardous decomposition products:

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

Chemical stability:

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

Reactivity:

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

# 11. Toxicological Information

#### Routes of exposure

## **Acute oral toxicity**

Experimental/calculated data:

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LD50rat (oral): > 5,000 mg/kg (OECD Guideline 401)

## Acute inhalation toxicity

LC50 rat (by inhalation): > 2.71 mg/l 4 h (OECD Guideline 403) No mortality was observed. An aerosol was tested.

#### Acute dermal toxicity

LD50 rat (dermal): > 2,000 mg/kg (OECD Guideline 402)

No mortality was observed.

#### Assessment of acute toxicity

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

#### **Symptoms**

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

#### Irritation

Assessment of irritating effects:

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

Experimental/calculated data:

Skin corrosion/irritation rabbit: (OECD Guideline 404)

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

#### Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible.

Experimental/calculated data:

modified Buehler test guinea pig: (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:

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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.

## Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

## 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:

Damages the skeletal muscle.

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## **Aspiration hazard**

No aspiration hazard expected.

#### Other relevant toxicity information

Misuse can be harmful to health.

## 12. Ecological Information

## **Ecotoxicity**

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

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) 0.01 mg/l (growth rate), Skeletonema costatum

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No observed effect concentration (72 h) 0.0076 mg/l (growth rate), Skeletonema costatum

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)

Chronic toxicity to fish:

No observed effect concentration (28 d) 0.0316 mg/l, Oncorhynchus mykiss

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), 0.00615 mg/l, Daphnia magna

## **Mobility**

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:

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

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#### 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.

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#### **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.

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#### **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.

# 14. Transport Information

**Domestic transport:** 

UN number or ID number: UN 3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(METIRAM)

Transport hazard class(es): 9, EHSM

Packing group:

Environmental hazards: yes

Special precautions for

user:

None known

#### Sea transport

**IMDG** 

UN number or ID number: UN 3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(METIRAM)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Marine pollutant: YES

Special precautions for

user:

EmS: F-A; S-F

# Air transport

IATA/ICAO

UN number or ID number: UN 3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(METIRAM)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for

None known

user:

#### **Further information**

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Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2:10.2.7; IATA: A197; TDS: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

## 15. Regulatory Information

## **Other regulations**

To avoid risks to man and the environment, comply with the instructions for use.

## 16. Other Information

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. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.