

Print Date 26.02.2025

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Alternet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Alternet

Authorisation number : PCS 05840

Active substance : Difenoconazole (25,7 %)
EC No.: 601-613-1
CAS No.: 119446-68-3
IUPAC Name: 3-chloro-4-((2RS,4RS;2RS,4SR)-4-methyl-2-(1H-1,2,4-triazol-1-ylmethyl)-1,3-dioxolan-2-yl)phenyl 4-chlorophenyl ether

Substance No. : 300000001815

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

Use of the Substance/Mixture : Fungicide for professional use.

1.3 Details of the supplier of the safety data sheet

Address : Belcrop BV
Tiensestraat 300
3400 Landen
Belgium

Telephone : +32 11 59 83 60
Telefax : +32 11 59 83 61
E-mail address Contact Point : info@belcrop.be

1.4 Emergency telephone number

National Poisons Information Centre (Beaumont Hospital): 01 809 2166 (8 AM - 10 PM)
Emergency number in Belgium (24h/24, 7d/7): +32 11 69 79 80

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters airways.
Skin corrosion/irritation, Category 2	H315: Causes skin irritation.
Serious eye damage/eye irritation, Category 1	H318: Causes serious eye damage.
Specific target organ toxicity - single exposure, Category 3	H336: May cause drowsiness or dizziness.

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Carcinogenicity, Category 2
Hazardous to the aquatic environment - Acute hazard, Category 1

H351: Suspected of causing cancer.
H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (Regulation (EC) No. 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements : P102 Keep out of reach of children.
P103 Read label before use.
P261 Avoid breathing spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 Collect spillage.
P501 Dispose of contents/ container to an approved incineration plant.

2.3 Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Mixture

Hazardous components

Chemical name	CAS No. EC No. Index No. Registration No.	Classification (Regulation (EC) No. 1272/2008) M-Factor/SCL/ATE	Conc. [%]
Difenoconazole	119446-68-3 601-613-1 - -	Acute Tox. 4; H302 Eye Irrit. 2; H319 Carc. 2; H351 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 Acute oral toxicity: 1.450 mg/kg	25,7
Hydrocarbons, C10, aromatics, <1% naphthalene	- 918-811-1 - 01-2119463583-34	Asp. Tox. 1; H304 Aquatic Chronic 2; H411 STOT SE 3; H336, EUH066	< 50
Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt	90194-26-6 290-635-1 - 01-2119560592-37	Skin Irrit. 2; H315 Eye Dam. 1; H318	< 10
N,N-dimethyloctanamide	1118-92-9 214-272-5 - -	Skin Irrit. 2; H315 Eye Dam. 1; H318	< 10
N,N-dimethyldecan-1-amide	14433-76-2 238-405-1 - -	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 3; H412	< 10
N-butanol	71-36-3 200-751-6 603-004-00-6 -	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336	< 5
Substances with a workplace exposure limit			
N-butanol	71-36-3 200-751-6 603-004-00-6 -	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335, H336	< 5

For the full text of the hazard statements mentioned in this Section, see Section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : If medical advice is needed, have product container or label at hand.
- If inhaled: : Remove person to fresh air. If signs/symptoms continue, get medical attention.
- In case of skin contact: : Wash off immediately with plenty of water for at least 15 minutes.
Remove contaminated clothing. If irritation develops, get medical attention.
Wash contaminated clothing before reuse.
- In case of eye contact: : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Protect unharmed eye.
Seek medical advice.
- If swallowed: : If swallowed, call a poisons information service or doctor immediately.
Rinse mouth.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the poisons information service.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water
Carbon dioxide (CO₂)
Dry powder
Polyvalent foam
- Unsuitable extinguishing media : Water spray jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire fighting : Fire will produce dense black smoke containing hazardous combustion products (see Section 10).
Exposure to decomposition products may be a hazard to

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health.

5.3 Advice for firefighters

- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
- Other information : Standard procedure for chemical fires. In the event of fire and/or explosion do not breathe fumes. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Use personal protective equipment. Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Ensure adequate ventilation. Refer to protective measures listed in Section 7 and 8.

6.2 Environmental precautions

- Environmental precautions : Discharge into the environment must be avoided. Prevent further leakage or spillage. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up with inert absorbent material. Shovel into suitable container for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

6.4 Reference to other sections

See Section 8 for exposure controls/personal protection. See Section 13 for disposal considerations.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Use only in area provided with appropriate exhaust ventilation. Handle with care. Avoid formation of aerosol. Avoid inhalation, ingestion and contact with skin and eyes. Wear personal protective equipment.

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For personal protection see Section 8.
Take care to avoid waste and spillage when weighing, loading and mixing the product.

Advice on protection against fire and explosion : Use explosion-proof equipment.
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

See Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Component	CAS No.	Form of exposure	Value type	Control parameters	Basis
N-butanol	71-36-3	Not specified	TWA	20 ppm	IE OEL

8.2 Exposure controls

Personal protective equipment

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
Recommended Filter type:
ABEK
: In the case of dust or aerosol formation use respirator with an approved filter.
Recommended Filter type:
P2FFP2

Hand protection : Protective gloves complying with EN 374.

Eye protection : Safety glasses with side-shields conforming to EN 166.

Skin and body protection : Long-sleeved clothing.

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Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
Store personal protection equipment in a clean location away from the work area.
Remove and wash contaminated clothing and gloves, including the inside, before re-use.
Keep away from food and drink.
Wash hands before eating, drinking, or smoking.

Protective measures : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing.
Always have on hand a first-aid kit, together with proper instructions.

Environmental exposure controls

General advice : Discharge into the environment must be avoided.
Prevent further leakage or spillage.
Prevent product from entering drains.
Local authorities should be advised if significant spillages cannot be contained.

Soil : Avoid subsoil penetration.

Water : Do not flush into surface water or sanitary sewer system.
Retain and dispose of contaminated wash water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : Yellow brown

Odour : Characteristic

Odour Threshold : No data available

Flash point : 61 °C

Ignition temperature : No data available

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

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Explosive properties	: Not explosive
Flammability	: No data available
Oxidising properties	: Not oxidising
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: 6,5 - 7,5
Melting point/melting range	: No data available
Boiling point/boiling range	: No information available.
Vapour pressure	: No data available
Density	: 0,989 g/cm ³ at 20 °C
Relative density	: 0,989 at 20 °C
Solubility in water	: No data available
Partition coefficient n-octanol/water	: Log Pow: 4,36 at pH 8 at 25 °C (Active substance)
Solubility in other solvents	: No data available
Dynamic viscosity	: No data available
Kinematic viscosity	: No data available
Relative vapour density	: No data available
Evaporation rate	: No data available
Particle size	: No data available

9.2 Other information

No additional information available.

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SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours.
Other hazardous decomposition products may be formed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Acute toxicity

Component

Acute oral toxicity
Difenoconazole
119446-68-3 : LD50: 1.453 mg/kg
Species: Rat
Remarks: Single dose

Acute toxicity estimate: 1.450 mg/kg

Component

Acute inhalation toxicity
Difenoconazole
119446-68-3 : LC50: > 3,3 mg/l
Exposure time: 4 h
Species: Rat
Remarks: Nose only.
Highest technically achievable concentration.

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Acute dermal toxicity
Difenoconazole : LD50: > 2.000 mg/kg
119446-68-3 Species: Rabbit
Remarks: 24 h

Skin corrosion/irritation

Component

Skin irritation
Difenoconazole : Species: Rabbit
119446-68-3 Results: No skin irritation
Exposure time: 4 h

Serious eye damage/eye irritation

Component

Eye irritation
Difenoconazole : Species: Rabbit
119446-68-3 Results: No eye irritation
Exposure time: 96 h

Respiratory or skin sensitization

Component

Sensitisation
Difenoconazole : Test type: Modified Buehler test
119446-68-3 Species: Guinea pig
Results: Did not cause sensitization on laboratory animals.
Remarks: Exposure time: 6 h

Germ cell mutagenicity

Component

Genotoxicity in vitro
Difenoconazole : Test type: Chromosome aberration test in vitro
119446-68-3 Results: Equivocal increases in chromosomal aberrations in
CHO cells in vitro.
Remarks: The substance is unlikely to be genotoxic

Genotoxicity in vivo
Difenoconazole : Test type: In vivo assay
119446-68-3 Species: Chinese hamster
Cell type: Ovary cells
Exposure time: 3 h
Remarks: The substance is unlikely to be genotoxic

Carcinogenicity

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Component

Difenoconazole : The substance is considered not likely to pose a carcinogenic
119446-68-3 risk to humans.

Reproductive toxicity

Component

Reproductive toxicity - Assessment

Difenoconazole : No toxicity to reproduction.
119446-68-3

Specific target organ toxicity - single exposure

Product

: Remarks: No data available

Component

Difenoconazole : Remarks: No data available
119446-68-3

Specific target organ toxicity - repeated exposure

Product

: Remarks: No data available

Component

Difenoconazole : Remarks: No data available
119446-68-3

Aspiration hazard

Product

Aspiration toxicity : No data available

Component

Difenoconazole : No data available
119446-68-3

11.2 Information on other hazards

Endocrine disrupting properties

Product:

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Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Product

Toxicity to fish : EC50: 0,65 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (Rainbow trout)

Component

Toxicity to fish

Difenoconazole : EC50: 1,1 mg/l
119446-68-3 Exposure time: 96 h
Species: Oncorhynchus mykiss (Rainbow trout)
Test Type: Flow-through test

Product

Toxicity to daphnia and other aquatic invertebrates. : EC50: 0,62 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Component

Toxicity to daphnia and other aquatic invertebrates.
Difenoconazole : EC50: 0,77 mg/l
119446-68-3 Exposure time: 48 h
Species: Daphnia magna (Water flea)
Test Type: Static test

Product

Toxicity to algae and aquatic plants : EyC50: 1,01 mg/l
Exposure time: 72 h
Species: Scenedesmus subspicatus

Component

Toxicity to algae and aquatic plants
Difenoconazole : EbC50: 0,032 mg/l
119446-68-3 Exposure time: 72 h
Species: Scenedesmus subspicatus

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Test Type: Static test

Component

M-Factor Acute aquatic toxicity

Difenoconazole : 10
119446-68-3

M-Factor Chronic aquatic toxicity

Difenoconazole : 10
119446-68-3

12.2 Persistence and degradability

Component

Stability in water

Difenoconazole : Degradation half-life (DT50): 315,5 d
119446-68-3

Component

Stability in soil

Difenoconazole : DT50: 130 d
119446-68-3

12.3 Bioaccumulative potential

Component

Bioaccumulation

Difenoconazole : Bioconcentration factor (BCF): 330
119446-68-3
Remarks: Some potential for bioaccumulation, but low risk for secondary poisoning.

Component

Partition coefficient n-octanol/water

Difenoconazole : Log Pow: 4,36 (25 °C)
119446-68-3 pH: 8

12.4 Mobility in soil

Component

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Distribution among environmental compartments

Difenoconazole : Koc: 3759,4
119446-68-3 Koc unit: mL/g
Remarks: Immobile to medium mobile

12.5 Results of PBT and vPvB assessment

Product

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product

Additional ecological information : No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.
Dispose of in accordance with local regulations.
The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : Triple rinse containers.
Do not re-use empty containers.
Store containers and offer for recycling of material when in accordance with the local regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 3082

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IMDG : UN 3082
IATA : UN 3082

14.2 UN proper shipping name

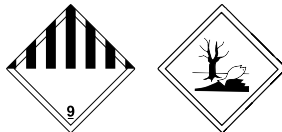
ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Difenoconazole)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Difenoconazole)

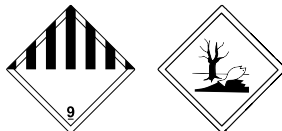
IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(Difenoconazole)

14.3 Transport hazard class(es)

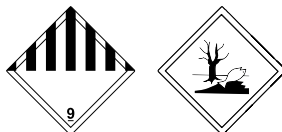
ADR : 9



IMDG : 9



IATA : 9



14.4 Packing group

ADR
Packing group : III
Hazard identification No : 90
Labels : 9
Tunnel restriction code : (-)
Limited quantity : 5,00 L

IMDG
Packing group : III
Labels : 9
EmS Code : F-A, S-F

IATA (Cargo)

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Packing instruction (cargo aircraft) : 964
Maximum quantity : 450,00 L
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous dangerous substance or article

IATA (Passenger)

Packing instruction (passenger aircraft) : 964
Maximum quantity : 450,00 L
Packing instruction (LQ) : Y964
Packing group : III
Labels : Miscellaneous dangerous substance or article

14.5 Environmental hazards

ADR

Environmentally hazardous : Yes

IATA (Passenger)

Environmentally hazardous : Yes

IATA (Cargo)

Environmentally hazardous : Yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Major Accident Hazard Legislation : Legislation on the control of major-accident hazards involving dangerous substances
SEVESO: E1

SEVESO

SEVESO category: Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

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SECTION 16: Other information

Full text of hazard statements referred to under Section 2 and 3.

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; ATE – Acute toxicity estimate; BCF - Bioconcentration factor; bw – Body weight; EC number – European Community number; ECx – Concentration associated with x % response; EmS – Emergency Schedule; ErCx – Concentration associated with x % growth rate response; GLP – Good Laboratory Practice; IATA – International Air Transport Association; IC50 – Half maximal inhibitory concentration; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; LC50 – Lethal Concentration to 50 % of a test population; LD50 – Lethal Dose to 50 % of a test population (Median Lethal Dose); M-factor – Multiplying factor; N.O.S. – Not Otherwise Specified; NO(A)EC – No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; OECD – Organization for Economic Co-operation and Development; OEL – Occupational exposure limit; PBT – Persistent, Bioaccumulative and Toxic substance; SCL – Specific Concentration Limit; TWA – Time-weighted average; UFI – Unique formula identifier; UN – United Nations; vPvB – Very Persistent and Very Bioaccumulative

Other information

Other information : Update of section 1.4

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.