

Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)
Classifications according to Regulation (EC) No 1272/2008.
Printdate 27 Sep 2024

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product name:

Difenoconazole

1.1. Catalog No.:

691291

1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical
uses: R&D

1.3. Uses advised against:

HPC Standards GmbH
Am Wieseneck 7

04451 Cunnersdorf
Deutschland

Tel. +49 34291 3372-36
Fax. +49 34291 3372-39
contact@hpc-standards.com

1.4. Emergency telephone number

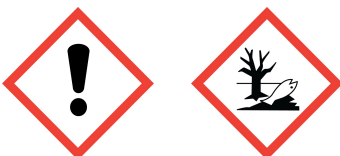
HPC Standards Tel. +49 34291 3372-36
This number is only available during office hours.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410 Classification according to EU Directives 67/548/EEC or 1999/45/EC
N, Xn Dangerous for the
environment, Harmful
R20/22, R50

2.2. Label elements

2.2.1. Pictogram



2.2.2.

Signal word Warning

Hazard statement(s)

H302 + H332 Harmful if swallowed or if inhaled H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard

Statements

none

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Formula : C₁₉H₁₇Cl₂N₃O₃

Molecular Weight : 406,26 g/mol

CAS-No. : 119446-68-3

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Difenoconazole

CAS-No.

119446-68-3

Acute Tox. 4; Aquatic Acute 1;

Aquatic Chronic 1; H302 +

H332, H410

<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

Difenoconazole

CAS-No.

119446-68-3

N, Xn, R20/22 - R50 <= 100 %

3.1.1. Formula

C₁₉H₁₇Cl₂N₃O₃

3.1.2. Molecular Weight (g/mol)

406.30

3.1.3. CAS-No.

119446-68-3

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NO_x), Hydrogen chloride gas

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour no data available

c) Odour Threshold no data available

d) pH no data available

e) Melting point/freezing point

no data available

f) Initial boiling point and boiling range

no data available

g) Flash point no data available

h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits

no data available

k) Vapour pressure no data available

l) Vapour density no data available

- m) Relative density no data available
- n) Water solubility 0,015 g/l at 25 °C
- o) Partition coefficient: n- log Pow: 3,975 octanol/water
- p) Auto-ignition temperature
no data available
- q) Decomposition temperature
no data available
- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available
- 9.2 Other safety information
no data available

10. STABILITY AND REACTIVITY

- 10.1 Reactivity
no data available
- 10.2 Chemical stability
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions
no data available
- 10.4 Conditions to avoid
no data available
- 10.5 Incompatible materials
Strong oxidizing agents
- 10.6 Hazardous decomposition products
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
 - Acute toxicity
 - LD50 Oral - rat - 1.453 mg/kg
 - LC50 Inhalation - rat - 4 h - 3.300 mg/m³
 - LD50 Dermal - rabbit - > 2.010 mg/kg
 - Skin corrosion/irritation
 - Skin - rabbit
 - Result: Mild skin irritation
 - Serious eye damage/eye irritation
 - Eyes - rabbit
 - Result: No eye irritation
 - Respiratory or skin sensitisation
 - Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.
 - Germ cell mutagenicity
no data available
 - Carcinogenicity
 - IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
 - Reproductive toxicity
 - Reproductive toxicity - rat - Oral
 - Maternal Effects: Other effects. Specific Developmental Abnormalities: Musculoskeletal system.
 - Specific target organ toxicity - single exposure
no data available
 - Specific target organ toxicity - repeated exposure
no data available
 - Aspiration hazard
no data available

Additional Information
RTECS: XZ4380000

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,81 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (Water flea) - 0,77 mg/l - 48 h
12.2 Persistence and degradability
no data available
12.3 Bioaccumulative potential
no data available
12.4 Mobility in soil
no data available
12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6 Other adverse effects
Very toxic to aquatic life with long lasting effects.
no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging
Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 3077 IMDG: 3077 IATA: 3077
14.2 UN proper shipping name
ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Difenoconazole)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Difenoconazole)
IATA: Environmentally hazardous substance, solid, n.o.s. (Difenoconazole)
14.3 Transport hazard class(es)
ADR/RID: 9 IMDG: 9 IATA: 9 14.4 Packaging group
ADR/RID: III IMDG: III IATA: III
14.5 Environmental hazards
ADR/RID: yes IMDG Marine pollutant: yes IATA: yes
14.6 Special precautions for user
Further information
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.
The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!