

Safety data sheet

Page: 1/19

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

1. Identification

Product identifier

Stamina F4 Cereals Fungicide Seed Treatment

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 SE

67056 Ludwigshafen

GERMANY

Operating Division Crop Protection

Telephone: +49 621 60-27777

E-mail address: Produktinformation-Pflanzenschutz@basf.com

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 5 (oral)

Repr. Additional category for effects on or via lactation.

Aquatic Acute 1

Aquatic Chronic 1

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

H303	May be harmful if swallowed.
H362	May cause harm to breast-fed children.
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):

P260	Do not breathe dust or mist.
P263	Avoid contact during pregnancy and while nursing.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.
P308 + P313	IF exposed or concerned: Get medical attention.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.
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Labeling of special preparations (GHS):

May produce an allergic reaction. Contains: metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate, 1,2-Benzisothiazol-3(2H)-one, mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

According to UN GHS criteria

Hazard determining component(s) for labelling: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Other hazards

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

According to UN GHS criteria

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

Substances

Not applicable

Mixtures

Chemical nature

crop protection product, fungicide

Hazardous ingredients (GHS)

According to UN GHS criteria

triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Content (W/W): 1,56 %

CAS Number: 138182-18-0

Repr. 2 (fertility)

STOT RE (Liver, Adrenal gland) 2

Aquatic Acute 1

Aquatic Chronic 1

M-factor chronic: 10

H361, H373, H400, H410

pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Content (W/W): 1,56 %

CAS Number: 175013-18-0

INDEX-Number: 613-272-00-6

Acute Tox. 3 (Inhalation - mist)

Skin Corr./Irrit. 2

STOT SE 3 (irr. to respiratory syst.)

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 100

M-factor chronic: 10

H315, H331, H335, H400, H410

metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Content (W/W): 0,9 %
CAS Number: 57837-19-1

Acute Tox. 4 (oral)
Skin Sens. 1
Repr. 2 (unborn child)
Aquatic Acute 3
Aquatic Chronic 3
H302, H317, H361, H402, H412

1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-;
Fluxapyroxad

Content (W/W): 0,78 %
CAS Number: 907204-31-3

Repr. Add. cat. lact.
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 1
M-factor chronic: 1
H362, H400, H410

Poly(oxy-1,2-ethanediyl), .alpha.-sulfo-.omega.-[2,4,6-tris(1-phenylethyl)phenoxy]-, ammonium salt

Content (W/W): < 3 %
CAS Number: 119432-41-6

Aquatic Acute 3
Aquatic Chronic 3
H402, H412

1,2-Benzisothiazol-3(2H)-one

Content (W/W): < 0,05 %
CAS Number: 2634-33-5
EC-Number: 220-120-9
INDEX-Number: 613-088-00-6

Acute Tox. 4 (oral)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
Skin Sens. 1
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 1
M-factor chronic: 1
H318, H315, H302, H317, H400, H410

Specific concentration limit:

Skin Sens. 1: >= 0,05 %

Bronopol

Content (W/W): < 0,05 %
CAS Number: 52-51-7
EC-Number: 200-143-0
INDEX-Number: 603-085-00-8

Acute Tox. 3 (Inhalation - dust)
Acute Tox. 3 (oral)
Acute Tox. 4 (dermal)
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
STOT SE 3 (irr. to respiratory syst.)
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 10
M-factor chronic: 1
H318, H315, H312, H335, H301 + H331, H400, H410

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Content (W/W): < 0,002 %
CAS Number: 55965-84-9
INDEX-Number: 613-167-00-5

Acute Tox. 3 (oral)
Acute Tox. 2 (Inhalation - mist)
Acute Tox. 2 (dermal)
Skin Corr./Irrit. 1C
Eye Dam./Irrit. 1
Skin Sens. 1A
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 100
M-factor chronic: 100
H301, H317, H314, H310 + H330, H400, H410
EUH071

Specific concentration limit:

Skin Sens. 1A: $\geq 0,0015$ %

Eye Dam./Irrit. 1: $\geq 0,6$ %

Eye Dam./Irrit. 2: 0,06 - < 0,6 %

Skin Corr./Irrit. 1C: $\geq 0,6$ %

Skin Corr./Irrit. 2: 0,06 - < 0,6 %

Propane-1,2-diol

Content (W/W): < 20 %

CAS Number: 57-55-6

EC-Number: 200-338-0

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

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.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, hydrogen chloride, Hydrogen bromide, Hydrogen fluoride, nitrogen oxides, halogenated compounds, sulfur oxides

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

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, protective equipment and emergency procedures

Do not breathe vapour/spray. 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 and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

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

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.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

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

Storage stability:

Storage duration: 24 Months

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

Control parameters

Components with occupational exposure limits

57-55-6: Propane-1,2-diol

175013-18-0: Carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl]methoxy-, methyl ester

TWA value 0,13 mg/m3 (BASF recomm. occupational exposure limit)

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

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

Information on basic physical and chemical properties

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Form:	liquid
Colour:	red
Odour:	odourless
Odour threshold:	
pH value:	not applicable, odour not perceivable approx. 5,5 - 7,5 (water, 1 %(m), 20 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Melting point:	approx. 0 °C Information applies to the solvent.
Boiling point:	approx. 79 °C The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Flash point:	No flash point - Measurement made up to the boiling point.
Evaporation rate:	not applicable
Flammability:	not applicable
Lower 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.
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.
Ignition temperature:	approx. 475 °C The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Vapour pressure:	approx. 23,4 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1,07 g/cm ³ (20 °C)
Relative vapour density (air):	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	not applicable

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Thermal decomposition: 170 °C, 250 kJ/kg
(onset temperature)
Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Viscosity, dynamic: approx. 59 mPa.s
(20 °C, 100 1/s)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Other information

Other Information:

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

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:

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

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

LD50 rat (oral): > 2.000 mg/kg (OECD Guideline 423)

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

LC50 rat (by inhalation): > 5,9 mg/l (OECD Guideline 403)

No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 5.000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

Assessment of irritating effects:

Not irritating to eyes and skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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:

No sensitizing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Buehler test guinea pig: Non-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.

Information on: Bronopol

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was mutagenic in various cell culture test systems; however, these results could not be confirmed in tests with mammals.

Carcinogenicity

Assessment of carcinogenicity:

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

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Assessment of carcinogenicity:

Indication of possible carcinogenic effect in animal tests. The effect is caused by an animal specific mechanism that has no human counter part.

Reproductive toxicity

Assessment of reproduction toxicity:

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

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

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Assessment of reproduction toxicity:

The potential to impair fertility cannot be excluded when given at maternally toxic doses.

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. May cause harm to children via breast-feeding.

Developmental toxicity

Assessment of teratogenicity:

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

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.

Information on: metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate

Assessment of teratogenicity:

Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Assessment of repeated dose toxicity:

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

Information on: Bronopol

Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation.

Information on: mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation. Based on available data, the classification criteria are not met.

Aspiration hazard

| not applicable

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

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

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Toxicity to fish:

LC50 (96 h) > 3,6 mg/l, Oncorhynchus mykiss

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Toxicity to fish:

LC50 (96 h) 0,00616 mg/l, Oncorhynchus mykiss (EPA 72-1, Flow through.)

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Toxicity to fish:

LC50 (96 h) 0,29 mg/l, Cyprinus carpio (Fish test acute, semistatic)

LC50 (96 h) 0,546 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)

LC50 (96 h) 1,15 mg/l, Lepomis macrochirus (OECD Guideline 203, static)

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

LC50 (96 h) 0,466 mg/l, *Pimephales promelas* (OECD Guideline 203, static)

Information on: metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate

Toxicity to fish:

LC50 (96 h) 27 mg/l, *Lepomis macrochirus*

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Aquatic invertebrates:

EC50 (96 h) 6,6 mg/l, *Americamysis bahia*

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Aquatic invertebrates:

EC50 (48 h) 0,0157 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Aquatic invertebrates:

EC50 (48 h) 6,78 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Information on: metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate

Aquatic invertebrates:

LC50 12,5 mg/l, *Daphnia magna*

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Aquatic plants:

EC50 (120 h) 0,31 mg/l, *Skeletonema costatum*

No observed effect concentration (120 h) 0,031 mg/l, *Skeletonema costatum*

EC50 (14 d) 1,4 mg/l, *Lemna gibba*

No observed effect concentration (14 d) 0,33 mg/l, *Lemna gibba*

EC50 (72 h) 10 mg/l, *Pseudokirchneriella subcapitata*

No observed effect concentration (72 h) 3,2 mg/l, *Pseudokirchneriella subcapitata*

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Aquatic plants:

EC50 (72 h) > 0,843 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Aquatic plants:

EC50 (72 h) 0,70 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

EC50 (96 h) 0,66 mg/l (growth rate), *Pseudokirchneriella subcapitata*

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

EC10 (72 h) 0,31 mg/l (growth rate), Pseudokirchneriella subcapitata

EC10 (96 h) 0,36 mg/l (growth rate), Pseudokirchneriella subcapitata

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Chronic toxicity to fish:

No observed effect concentration (28 d) 0,01 mg/l, Oncorhynchus mykiss

No observed effect concentration (175 d) 0,0114 mg/l, Pimephales promelas

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Chronic toxicity to fish:

No observed effect concentration (98 d) approx. 0,00235 mg/l, Oncorhynchus mykiss (OECD Guideline 210, Flow through.)

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Chronic toxicity to fish:

No observed effect concentration (33 d) 0,0359 mg/l, Pimephales promelas (OECD Guideline 210, Flow through.)

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (28 d) 0,041 mg/l, Mysidopsis bahia

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d) 0,004 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)

The details of the toxic effect relate to the nominal concentration.

No observed effect concentration (28 d) 0,00128 mg/l, Mysidopsis bahia (OPP 72-4 (EPA-Guideline), Flow through.)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d) 0,5 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

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: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

*Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria).*

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

*Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria).*

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

*Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria).*

Information on: metalaxyl (ISO); methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-DL-alaninate

*Assessment biodegradation and elimination (H₂O):
Not readily biodegradable (by OECD criteria).*

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: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Bioaccumulation potential:

Bioconcentration factor: 72,55 (42 d), Lepomis macrochirus

Does not accumulate in organisms.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

Bioaccumulation potential:

Bioconcentration factor: 379 - 507, Oncorhynchus mykiss (OECD-Guideline 305)

Accumulation in organisms is not to be expected.

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

Bioaccumulation potential:

Bioconcentration factor: 36 - 37 (28 d), Lepomis macrochirus (OECD-Guideline 305)

Does not accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments:

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

Information on: triticonazole (ISO); (RS)-(E)-5-(4-chlorobenzylidene)-2,2-dimethyl-1-(1H-1,2,4-triazol-1-methyl)cyclopentanol

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxyethyl}phenyl}(N-methoxy)carbamate

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.

Information on: 1H-Pyrazole-4-carboxamide, 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluoro[1,1'-biphenyl]-2-yl)-; Fluxapyroxad

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.

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.

Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Waste treatment methods

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

Land transport

ADR

UN number or ID number: UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRACLOSTROBIN, TRITICONAZOLE)

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

Special precautions for user: None known

RID

UN number or ID number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRACLOSTROBIN, TRITICONAZOLE)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Inland waterway transport

ADN

UN number or ID number: UN3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRACLOSTROBIN, TRITICONAZOLE)

Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

UN number or ID number: UN 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (PYRACLOSTROBIN, TRITICONAZOLE)

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

 Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

UN number or ID number: UN 3082
 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
 N.O.S. (PYRACLOSTROBIN, TRITICONAZOLE)

Transport hazard class(es): 9, EHS
 Packing group: III
 Environmental hazards: yes
 Special precautions for user: None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: 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

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

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

16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Acute Tox.	Acute toxicity
Repr.	Reproductive toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
STOT RE	Specific target organ toxicity — repeated exposure
Skin Corr./Irrit.	Skin corrosion/irritation
STOT SE	Specific target organ toxicity — single exposure
Skin Sens.	Skin sensitization
Eye Dam./Irrit.	Serious eye damage/eye irritation
H361	Suspected of damaging fertility.
H373	May cause damage to organs (Liver, Adrenal gland) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H315	Causes skin irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H302	Harmful if swallowed.

Safety data sheet according to UN GHS 4th rev.

Date / Revised: 14.04.2023

Version: 4.0

Product: **Stamina F4 Cereals Fungicide Seed Treatment**

(ID no. 30780911/SDS_CPA_00/EN)

Date of print 17.05.2024

H317	May cause an allergic skin reaction.
H361	Suspected of damaging the unborn child.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
H362	May cause harm to breast-fed children.
H318	Causes serious eye damage.
H312	Harmful in contact with skin.
H301 + H331	Toxic if swallowed or if inhaled
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H310 + H330	Fatal in contact with skin or if inhaled
EUH071	Corrosive to the respiratory tract.

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.

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