

# Safety data sheet

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BASF Safety data sheet according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended from time to time.

Date / Revised: 14.04.2025

Version: 4.0

Date / Previous version: 18.12.2024

Previous version: 3.0

Product: **Shepherd®**

(ID no. 30771618/SDS\_CPA\_GB/EN)

Date of print 14.04.2025

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

### 1.1. Product identifier

**Shepherd®**

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

Relevant identified uses: crop protection product, fungicide

### 1.3. Details of the supplier of the safety data sheet

Company:

BASF plc

4th and 5th Floors

2 Stockport Exchange

Railway Road, Stockport, SK1 3GG

UNITED KINGDOM

Telephone: +44 161 475 3000

E-mail address: product-safety-uk-and-ireland@basf.com

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

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According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Acute Tox. 4 (oral)	H302 Harmful if swallowed.
Skin Corr./Irrit. 2	H315 Causes skin irritation.
Skin Sens. 1B	H317 May cause an allergic skin reaction.
Acute Tox. 4 (Inhalation - mist)	H332 Harmful if inhaled.
STOT SE 3	H335 May cause respiratory irritation.
Repr. 2	H361d Suspected of damaging the unborn child.
STOT RE 2	H373 May cause damage to organs (Liver, Nasal cavity, Gastrointestinal tract) through prolonged or repeated exposure.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
Aquatic Acute 1	H400 Very toxic to aquatic life.

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

## 2.2. Label elements

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Pictogram:



Signal Word:

Warning

Hazard Statement:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs (Liver, Nasal cavity, Gastrointestinal tract) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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 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):

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P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist.
P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing and eye protection or face protection.

Precautionary Statements (Response):

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P312	Call a POISON CENTER or physician if you feel unwell.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330	Rinse mouth.
P308 + P313	IF exposed or concerned: Get medical attention.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
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Labeling of special preparations (GHS):

May produce an allergic reaction. Contains: 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one

Hazard determining component(s) for labelling: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl}(N-methoxy)carbamate, 2-methylisothiazol-3(2H)-one

### 2.3. Other hazards

According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

#### Chemical nature

crop protection product, fungicide, suspension concentrate (SC)

#### Hazardous ingredients (GHS)

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

Content (W/W): 21.89 %  
CAS Number: 175013-18-0  
INDEX-Number: 613-272-00-6

Acute Tox. 3 (Inhalation - mist)  
Acute Tox. 4 (oral)  
Skin Irrit. 2  
Repr. 2 (unborn child)  
STOT SE 3 (irr. to respiratory syst.)  
STOT RE (Liver, Nasal cavity, Gastrointestinal tract) 2  
Aquatic Acute 1  
Aquatic Chronic 1  
M-factor acute: 100  
M-factor chronic: 100  
H315, H331, H302, H335, H361d, H373, H400, H410

boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

Content (W/W): 13.13 %  
CAS Number: 188425-85-6

Aquatic Chronic 2  
H411

Residues (petroleum), catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts

Content (W/W): < 5 %  
CAS Number: 68425-94-5

Eye Dam./Irrit. 2  
Aquatic Chronic 3  
H319, H412

Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt

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<p>Content (W/W): &lt; 5 % CAS Number: 102980-04-1</p>	<p>Eye Dam./Irrit. 2 Aquatic Chronic 3 H319, H412</p>
1,2-benzisothiazol-3(2H)-one	
<p>Content (W/W): &lt; 0.01 % CAS Number: 2634-33-5 EC-Number: 220-120-9 REACH registration number: 01-2120761540-60 INDEX-Number: 613-088-00-6</p>	<p>Acute Tox. 2 (Inhalation - dust) Acute Tox. 4 (oral) Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1A Aquatic Acute 1 Aquatic Chronic 1 M-factor acute: 1 M-factor chronic: 1 H318, H315, H330, H302, H317, H400, H410</p> <p><u>Specific concentration limit:</u> Skin Sens. 1A: &gt;= 0.036 %</p>
2-methylisothiazol-3(2H)-one	
<p>Content (W/W): &lt; 0.01 % CAS Number: 2682-20-4 EC-Number: 220-239-6 INDEX-Number: 613-326-00-9</p>	<p>Acute Tox. 2 (Inhalation - dust) Acute Tox. 3 (oral) Acute Tox. 3 (dermal) Skin Corr. 1B Eye Dam. 1 Skin Sens. 1A Aquatic Acute 1 Aquatic Chronic 1 M-factor acute: 10 M-factor chronic: 1 H330, H317, H314, H301 + H311, H400, H410 EUH071</p> <p><u>Specific concentration limit:</u> Skin Sens. 1A: &gt;= 0.0015 % Skin Sens. 1A: &gt;= 0.0015 %</p>
Propane-1,2-diol	
<p>Content (W/W): &lt; 5 % CAS Number: 57-55-6 EC-Number: 200-338-0 REACH registration number: 01-2119456809-23</p>	

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Show container, label and/or safety data sheet to physician.

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately 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, consult an eye specialist.

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: 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

Hazards: 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

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

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

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## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

### 5.2. Special hazards arising from the substance or mixture

Endangering substances: carbon monoxide, Carbon dioxide, hydrogen chloride, nitrogen oxides, sulfur oxides, halogenated compounds

Advice: 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.

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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.

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## SECTION 6: Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. 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.

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environment Agency (England & Wales), the Scottish Environmental Protection Agency (Scotland), or the Environment and Heritage Service (Northern Ireland) if it enters surface or ground waters. Keep people and animals away.

### 6.3. 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.

### 6.4. Reference to other sections

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

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## SECTION 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.

Protection against fire and explosion:

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

### 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 from direct sunlight.

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Protect from temperatures below: 0 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

### 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.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

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

TWA value 474 mg/m<sup>3</sup> ; 150 ppm (WEL/EH 40 (UK)), Total vapour and particulates

TWA value 10 mg/m<sup>3</sup> (WEL/EH 40 (UK)), Particulate

175013-18-0: pyraclostrobin (ISO)

TWA value 0.13 mg/m<sup>3</sup> (BASF recomm. occupational exposure limit)

188425-85-6: 3-Pyridinecarboxamide, 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-

TWA value 0.248 mg/m<sup>3</sup> (BASF recomm. occupational exposure limit)

Refer to the current edition of HSE Guidance Note EH40 Occupational Exposure Limits (United Kingdom). For normal use and handling refer to the product label/leaflet.

### 8.2. Exposure controls

#### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e. g. EN 14387 Type ABEK-P3)

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:



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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.

## **SECTION 9: Physical and Chemical Properties**

### **9.1. Information on basic physical and chemical properties**

Form:	liquid
Colour:	off-white to beige
Odour:	sweetish
Odour threshold:	Not determined since harmful by inhalation.
pH value:	approx. 6 - 8 (20 °C)
Freezing point:	approx. -3.2 °C
boiling temperature:	approx. 100 °C Information applies to the solvent.
Flash point:	Non-flammable.
Evaporation rate:	not applicable
Flammability:	not self-igniting
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:	> 651 °C
Vapour pressure:	approx. 23.3 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1.14 g/cm <sup>3</sup> (20 °C)

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Relative vapour density (air):

not applicable

Solubility in water: dispersible

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

not applicable for mixtures

Thermal decomposition: 170 °C, 160 kJ/kg, (DSC (OECD 113))

(onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Viscosity, dynamic: approx. 107 mPa.s

(20 °C, 100 1/s)

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

## 9.2. Other information

Grain size distribution: The substance / product is marketed or used in a non solid or granular form.

Other Information:

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

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## SECTION 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.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

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### Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 300 - < 2,000 mg/kg (OECD Guideline 423)

LC50 rat (by inhalation): > 3.4 mg/l 4 h (OECD Guideline 403)  
An aerosol was tested.

LD50 rat (dermal): > 5,000 mg/kg

### Irritation

Assessment of irritating effects:

Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation  
rabbit: Irritant.

Serious eye damage/irritation  
rabbit: non-irritant

### Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible. The product has not been tested. The statement has been derived from the properties of the individual components.

**Information on: 2-methylisothiazol-3(2H)-one**

Experimental/calculated data:

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

### Germ cell mutagenicity

Assessment of mutagenicity:

Mutagenicity tests revealed no genotoxic potential. The product has not been tested. The statement has been derived from the properties of the individual components.

### Carcinogenicity

Assessment of carcinogenicity:

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

*Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide*

*Assessment of carcinogenicity:*

*In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.*

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#### Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from the properties of the individual components.

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

*Assessment of teratogenicity:*

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

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#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Target organ: Respiratory system

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

*Assessment of repeated dose toxicity:*

*Repeated exposure may affect certain organs. Target organs: Liver, gastrointestinal tract and nasal cavity*

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Aspiration hazard

not applicable

Other relevant toxicity information

Misuse can be harmful to health.

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## SECTION 12: Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

Toxicity to fish:

LC50 (96 h) 0.033 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 0.024 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 6.9 mg/l, *Pseudokirchneriella subcapitata*

EC10 (72 h) 0.73 mg/l, *Pseudokirchneriella subcapitata*

*Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide*

*Chronic toxicity to fish:*

**|** *No observed effect concentration (97 d) 0.116 mg/l, *Oncorhynchus mykiss**

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*Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}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 (31 d) 0.000365 mg/l, *Mysidopsis bahia**

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**|** *Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide  
Chronic toxicity to aquatic invertebrates:*

**|** *No observed effect concentration (21 d) 0.8 mg/l, Daphnia magna*  
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## 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

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

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

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*Not readily biodegradable (by OECD criteria).*

**|** *Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide  
Assessment biodegradation and elimination (H<sub>2</sub>O):*

**|** *Not readily biodegradable (by OECD criteria).*  
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## 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: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl}(N-methoxy)carbamate*

*Bioaccumulation potential:*

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

*Accumulation in organisms is not to be expected.*

**|** *Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide  
Bioaccumulation potential:*

**|** *Bioconcentration factor (BCF): 57 - 70 (28 d), Oncorhynchus mykiss  
Does not accumulate in organisms.*  
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## 12.4. 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: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl}(N-methoxy)carbamate*

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*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.*

**I** *Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide*

*Assessment transport between environmental compartments:*

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

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## **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.

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## **SECTION 13: Disposal Considerations**

### **13.1. Waste treatment methods**

Must be disposed of or incinerated in accordance with local regulations.

The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).

This product and any uncleaned containers must be disposed of as hazardous waste in accordance with the 2005 Hazardous Waste Regulations and amendments (United Kingdom)

Contaminated packaging:

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

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## **SECTION 14: Transport Information**

### **Land transport**

ADR

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UN number or ID number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, BOSCALID)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

#### RID

UN number or ID number: UN3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, BOSCALID)  
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. (contains PYRACLOSTROBIN, BOSCALID)  
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. (contains PYRACLOSTROBIN, BOSCALID)  
Transport hazard class(es): 9, EHSM  
Packing group: III  
Environmental hazards: yes  
Marine pollutant: YES  
Special precautions for user:



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## **Air transport**

IATA/ICAO

UN number or ID number: UN 3082  
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, BOSCALID)  
Transport hazard class(es): 9, EHS  
Packing group: III  
Environmental hazards: yes  
Special precautions for user: None known

### **14.1. UN number or ID number**

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

### **14.7. 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

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Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

This product is subject to the most recent edition of "The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations" and their amendments (United Kingdom).

## SECTION 15: Regulatory Information

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

#### Prohibitions, Restrictions and Authorizations

UK REACH SI, Annex XVII, Marketing and Use Restrictions  
Number on List: 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):  
List entry in regulation: E1  
Classification applies for standard conditions of temperature and pressure.

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

The data should be considered when making any assessment under the Control of Substances Hazardous to Health Regulations (COSHH), and related guidance, for example, 'COSHH Essentials' (United Kingdom).

This product may be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments if specific threshold tonnages are exceeded (United Kingdom).

## SECTION 16: Other Information

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

Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
STOT SE	Specific target organ toxicity — single exposure
Repr.	Reproductive toxicity
STOT RE	Specific target organ toxicity — repeated exposure
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Aquatic Acute	Hazardous to the aquatic environment - acute
Skin Irrit.	Skin irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
Eye Dam.	Serious eye damage

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Skin Corr.	Skin corrosion
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs (Liver, Nasal cavity, Gastrointestinal tract) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
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.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin.
EUH071	Corrosive to the respiratory tract.

#### Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

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.