

Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 10.02.2025

Version: 2.0

Date / Previous version: 07.06.2023

Previous version: 1.0

Product: **Signum®**

(ID no. 30266621/SDS CPA XI/EN)

Date of print 18.02.2025

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

1.1. Product identifier

Signum®

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

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.

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 (oral)

H302 Harmful if swallowed.

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Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 1	H410 Very toxic to aquatic life with long lasting effects.
Repr. 2	H361d Suspected of damaging the unborn child.

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 Regulation (EC) No 1272/2008 [CLP]

Globally Harmonized System (GHS) in accordance with UK regulations.

Pictogram:



Signal Word:

Warning

Hazard Statement:

H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H361d	Suspected of damaging the unborn child.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Prevention):

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash with plenty of water and soap thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves, protective clothing and eye protection or face protection.

Precautionary Statements (Response):

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical attention.
P330	Rinse mouth.
P391	Collect spillage.

Precautionary Statements (Storage):

P405	Store locked up.
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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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Hazard determining component(s) for labelling: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide, pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

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

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

crop protection product, fungicide, water dispersible granules

Regulatory relevant ingredients

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

Content (W/W): 26.7 %

Aquatic Chronic 2

CAS Number: 188425-85-6

H411

Substance with EU occupational exposure limit

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

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Content (W/W): 6.7 %
CAS Number: 175013-18-0
INDEX-Number: 613-272-00-6

Substance with EU occupational
exposure limit

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

Acute toxicity estimate:

oral: 450 mg/kg
Inhalation: 0.58 mg/l

| Naphthalenesulfonic acids, branched and linear Bu derivs., sodium salts

Content (W/W): < 5 %
CAS Number: 91078-64-7
EC-Number: 293-346-9

Acute Tox. 4 (Inhalation - dust)
Acute Tox. 4 (oral)
Eye Dam./Irrit. 1
Aquatic Chronic 3
H318, H302 + H332, H412

| Formaldehyde

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Content (W/W): < 0.1 %	Acute Tox. 2 (Inhalation - vapour)
CAS Number: 50-00-0	Acute Tox. 3 (oral)
EC-Number: 200-001-8	Acute Tox. 3 (dermal)
REACH registration number: 01-2119488953-20	Skin Corr. 1B
INDEX-Number: 605-001-00-5	Eye Dam. 1
	Skin Sens. 1
	Muta. 2
Substance with EU occupational exposure limit	Carc. 1B
	H330, H317, H350, H341, H314, H301 + H311
	<u>Differing classification according to current knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008</u>
	Acute Tox. 3 (dermal)
	Acute Tox. 2 (Inhalation - vapour)
	Acute Tox. 3 (oral)
	Skin Sens. 1A
	Muta. 2
	Carc. 1B
	Skin Corr. 1B
	Eye Dam. 1
	<u>Specific concentration limit:</u>
	Eye Dam./Irrit. 2: 5 - < 25 %
	STOT SE 3, irr. to respiratory syst.: >= 5 %
	Skin Sens. 1: >= 0.2 %
	Skin Corr./Irrit. 2: 5 - < 25 %
	Skin Corr./Irrit. 1B: >= 25 %

Silicon dioxide

Content (W/W): < 10 %
CAS Number: 7631-86-9
EC-Number: 231-545-4
REACH registration number: 01-2119379499-16

Particle characteristics of nanoform:

Particle size distribution:	1 - 100 nm (D10)
	1 - 100 nm (D50)
	1 - 100 nm (D90)
Particle Shape:	spheres
Crystallinity:	amorphous
Specific Surface Area:	8.8 - 2,200 m ² /cm ³ (VSSA)
	4 - 1,000 m ² /g (MSSA)
Surface treatment/coating:	no

Ammonium sulphate

Content (W/W): < 10 %
CAS Number: 7783-20-2
EC-Number: 231-984-1
REACH registration number: 01-2119455044-46

Sodium sulphate

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Content (W/W): < 5 %
CAS Number: 7757-82-6
EC-Number: 231-820-9
REACH registration number: 01-
2119519226-43

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.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

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

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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:

Rinse mouth and then drink 200-300 ml of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far, 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.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:

carbon dioxide

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5.2. Special hazards arising from the substance or mixture

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

Further information:

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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

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: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

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:

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

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 against moisture. Protect from direct sunlight.

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.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

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. In all other cases the following apply.

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

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

State of matter:	solid	
Form:	granules	
Colour:	brown	
Odour:	smoky	
Odour threshold:		
Melting temperature:	Not determined due to potential health hazard by inhalation. approx. 142 - 144 °C The data given are those of the active ingredient.	(OECD Guideline 102)
Boiling point:		
Flammability:	The product has not been tested. No dangerous quantities of flammable gases will be produced by contact with water.	(Directive 92/69/EEC, A.12)
Lower explosion limit:		
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.	
Flash point:		
Auto-ignition temperature:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Thermal decomposition:	not applicable, the product is a solid not applicable, the product is a solid 150 °C, 130 kJ/kg (DSC (OECD 113)) (onset temperature) 335 °C, 130 kJ/kg (DSC (OECD 113)) (onset temperature)	

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	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
pH value:	approx. 4 - 6 (CIPAC standard water D, 1 %(m), 20 °C) (as suspension)	
Viscosity, kinematic:	not applicable, the product is a solid	
Viscosity, dynamic:	not applicable, the product is a solid	
Thixotropy:	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Kow):	not applicable for mixtures	
Vapour pressure:	negligible	
Density:	approx. 1.57 g/cm ³ (20 °C)	(OECD Guideline 109)
Relative vapour density (air):	not applicable, The product is a non-volatile solid.	

Particle characteristics

Particle size distribution:	4.6 µm
	1.5 µm
	0.5 µm

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive (Directive 92/69/EEC, A.14)

Oxidizing properties

Fire promoting properties: not fire-propagating (Directive 92/69/EEC, A.17)

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2.

Other safety characteristics

Bulk density: 656 - 754 kg/m³

SECTION 10: Stability and Reactivity

10.1. Reactivity

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

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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.

SECTION 11: Toxicological Information

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

Acute toxicity

Assessment of acute toxicity:

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

Experimental/calculated data:

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

No mortality was observed.

LC50 rat (by inhalation): > 5.6 mg/l 4 h (OECD Guideline 403)

No mortality was observed.

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

No mortality was observed.

Irritation

Assessment of irritating effects:

Not irritating to eyes and skin.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation

rabbit: non-irritant (OECD Guideline 405)

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Respiratory/Skin sensitization

Assessment of sensitization:

No sensitizing effect.

Experimental/calculated data:

Mouse Local Lymph Node Assay (LLNA) mouse: Non-sensitizing. (OECD Guideline 429)

modified 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: Formaldehyde

Assessment of mutagenicity:

Reliable studies did not give evidence for systemic genotoxicity in experimental animals or in humans. Although positive in various in vitro studies, the substance does not induce local mutagenic effects in the absence of chronic irritation based on today's knowledge.

Carcinogenicity

Assessment of carcinogenicity:

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.

Information on: Formaldehyde

Assessment of carcinogenicity:

After lifelong inhalation exposure to concentrations that were severely damaging to the nasal epithelium, nasal tumors were induced in rats; in other species these findings were not found or were considerably less pronounced. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on epidemiological evidence linking formaldehyde exposure to occurrence of nasopharyngeal cancer and leukemia. No adverse health effects are anticipated if recommended personal protective equipment and industrial hygiene practices are used.

Reproductive toxicity

Assessment of reproduction toxicity:

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

Developmental toxicity

Assessment of teratogenicity:

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

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

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

Assessment of repeated dose toxicity:

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

| *Information on: Formaldehyde*

Assessment of repeated dose toxicity:

After repeated exposure the prominent effect is local irritation.

| *Information on: Silicon dioxide*

Assessment of repeated dose toxicity:

| *Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.*

Aspiration hazard

| not applicable

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting

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properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Other information

Other relevant toxicity information

Misuse can be harmful to health.

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) 0.35 mg/l, *Cyprinus carpio*

Aquatic invertebrates:

EC50 (48 h) 0.21 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 10.8 mg/l, *Pseudokirchneriella subcapitata* (OECD Guideline 201)

EC10 (72 h) 1.8 mg/l, *Pseudokirchneriella subcapitata*

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**

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: 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**

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 (31 d) 0.000365 mg/l, *Mysidopsis bahia**

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

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

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

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

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: 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.

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

Bioaccumulation potential:

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

Accumulation in organisms is not to be expected.

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

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.

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

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. Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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.

SECTION 14: Transport Information

Land transport

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ADR

UN number or ID number: UN3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(BOSCALID, PYRACLOSTROBIN)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Special precautions for user: None known

RID

UN number or ID number: UN3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(BOSCALID, PYRACLOSTROBIN)
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: UN3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(BOSCALID, PYRACLOSTROBIN)
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 3077
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(BOSCALID, PYRACLOSTROBIN)
Transport hazard class(es): 9, EHSM
Packing group: III
Environmental hazards: yes
Marine pollutant: YES
Special precautions for user: EmS: F-A; S-F

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user:

Air transport

IATA/ICAO

UN number or ID number: UN 3077

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

Transport hazard class(es): 9, EHSM

Packing group: III

Environmental hazards: yes

Special precautions for user: None known

user:

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 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2:10.2.7; IATA: A197; TDS: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road

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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

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 75

Restrictions of Regulation (EC) No 1907/2006, Annex XVII, do not apply for the intended use(s) of the product given in this SDS.

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.

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

This product is classified under the European CLP Regulation.

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).

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

SECTION 16: Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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

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

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Eye Dam.	Serious eye damage
Skin Sens.	Skin sensitization
Muta.	Germ cell mutagenicity
Carc.	Carcinogenicity
Skin Corr./Irrit.	Skin corrosion/irritation
H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H361d	Suspected of damaging the unborn child.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
H411	Toxic to aquatic life with long lasting effects.
H315	Causes skin irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs (Liver, Nasal cavity, Gastrointestinal tract) through prolonged or repeated exposure.
H318	Causes serious eye damage.
H302 + H332	Harmful if swallowed or if inhaled.
H412	Harmful to aquatic life with long lasting effects.
H330	Fatal if inhaled.
H317	May cause an allergic skin reaction.
H350	May cause cancer.
H341	Suspected of causing genetic defects.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin.

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

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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.