We create chemistry

Safety data sheet

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

1.1. Product identifier

Opera

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 SE
67056 Ludwigshafen
GERMANY
Operating Division Crop Protection

Telephone: +49 621 60-27777
E-mail address: Produktinformation-Pflanzenschutz@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)
Acute Tox. 4 (Inhalation - mist)
Skin Corr./Irrit. 2
Carc. 2
Repr. 1B (unborn child)
Aquatic Acute 1
Aquatic Chronic 1

H315, H332, H302, H351, H360Df, H400, H410, EUH401

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

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:

Signal Word:
Danger

Hazard Statement:

H315	Causes skin irritation.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
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 label before use.

Precautionary Statements (Prevention):

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

Precautionary Statements (Response):

P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P330	Rinse mouth.
P391	Collect spillage.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Labeling of special preparations (GHS):
EUH208: May produce an allergic reaction. Contains: 2-methylisothiazol-3(2H)-one, 1,2-benzisothiazol-3(2H)-one

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

Hazard determining component(s) for labelling: pyraclostrobin (ISO), epoxiconazole(ISO)

2.3. Other hazards

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

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.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

This product contains (a) substance(s) included on the candidate list according to article 59 (1,10) of regulation EC No. 1907/2006 ('REACH') in a concentration equal or above 0.1% w/w: Pitch, coal tar, high-temp.; Pitch; [The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 oC to 180 oC (86oF to 356oF). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.]

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

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

Content (W/W): 12.62 %	Acute Tox. 3 (Inhalation - mist)
CAS Number: 175013-18-0	Skin Corr./Irrit. 2
INDEX-Number: 613-272-00-6	STOT SE 3 (irr. to respiratory syst.)
	Aquatic Acute 1
	Aquatic Chronic 1
	M-factor acute: 100
	M-factor chronic: 100
	H315, H331, H335, H400, H410

epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane

Content (W/W): 4.77 %	Carc. 2
CAS Number: 133855-98-8	Repr. 1B
EC-Number: 406-850-2	Aquatic Chronic 2
INDEX-Number: 613-175-00-9	H351, H360Df, H411

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified; [A complex combination of hydrocarbons obtained from distillation of aromatic streams. It consists predominantly of aromatic hydrocarbons having carbon numbers predominantly in the range of C9 thro ugh C16 and boiling in the range of approximately 165 oC to 290 oC (330 oF to 554 oF).]

Content (W/W): < 40 %	Asp. Tox. 1
CAS Number: 64742-94-5	Aquatic Chronic 2
REACH registration number: 01-2119451097-39	H304, H411
	EUH066

Alcohols, C16-18, ethoxylated propoxylated

Content (W/W): < 15 %
CAS Number: 68002-96-0

Acute Tox. 2 (Inhalation - mist)
Aquatic Acute 1
Aquatic Chronic 3
H330, H412, H400

2-Methylnaphthalene

Content (W/W): < 15 %
CAS Number: 91-57-6
EC-Number: 202-078-3
REACH registration number: 01-2119489455-25

Acute Tox. 4 (oral)
Aquatic Chronic 2
H302, H411

1-Methylnaphthalene

Content (W/W): < 10 %
CAS Number: 90-12-0
EC-Number: 201-966-8
REACH registration number: 01-2119489997-0

Acute Tox. 4 (oral)
Aquatic Chronic 2
H302, H411

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

Content (W/W): < 5 %
CAS Number: 102980-04-1

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

biphenyl

Content (W/W): < 3 %
CAS Number: 92-52-4
EC-Number: 202-163-5
REACH registration number: 01-2119480408-33
INDEX-Number: 601-042-00-8

Skin Corr./Irrit. 2
Eye Dam./Irrit. 2
STOT SE 3 (irr. to respiratory syst.)
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 1
M-factor chronic: 1
H319, H315, H335, H400, H410

Pitch, coal tar, high-temp.; Pitch; [The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 oC to 180 oC (86oF to 356oF). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.]

Content (W/W): 0.0321 %
CAS Number: 85-01-8
EC-Number: 201-581-5
INDEX-Number: 648-055-00-5

Acute Tox. 4 (oral)
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 10
M-factor chronic: 1
H302, H400, H410

naphthalene

Content (W/W): < 0.5 %	Flam. Sol. 2
CAS Number: 91-20-3	Acute Tox. 4 (oral)
EC-Number: 202-049-5	Carc. 2
REACH registration number: 01-2119561346-37	Aquatic Acute 1
INDEX-Number: 601-052-00-2	Aquatic Chronic 1
	M-factor acute: 1
	M-factor chronic: 1
	H228, H302, H351, H400, H410

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

Content (W/W): < 0.05 %	Acute Tox. 4 (oral)
CAS Number: 2634-33-5	Skin Corr./Irrit. 2
EC-Number: 220-120-9	Eye Dam./Irrit. 1
REACH registration number: 01-2120761540-60	Skin Sens. 1
INDEX-Number: 613-088-00-6	Aquatic Acute 1
	M-factor acute: 1
	M-factor chronic: 1
	H318, H315, H302, H317, H400
	Specific concentration limit:
	Skin Sens. 1: >= 0.05 %

2-methylisothiazol-3(2H)-one

Content (W/W): < 0.05 %	Acute Tox. 2 (Inhalation - dust)
CAS Number: 2682-20-4	Acute Tox. 3 (oral)
EC-Number: 220-239-6	Acute Tox. 3 (dermal)
INDEX-Number: 613-326-00-9	Skin Corr./Irrit. 1B
	Eye Dam./Irrit. 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
	Specific concentration limit:
	Skin Sens. 1A: >= 0.0015 %

Propane-1,2-diol

Content (W/W): < 2 %
CAS Number: 57-55-6
EC-Number: 200-338-0
REACH registration number: 01-2119456809-23

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

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:
Immediately wash thoroughly with soap and water, seek medical attention.

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

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

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

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
water spray, foam, dry powder, carbon dioxide

5.2. Special hazards arising from the substance or mixture

carbon monoxide, Carbon dioxide, hydrogen fluoride, hydrogen chloride, nitrogen oxides, organochloric compounds, hydrogen halides
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:
In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

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

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.

6.4. Reference to other sections

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

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.

Storage stability:
Storage duration: 24 Months

Protect from temperatures below: 5 °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: 35 °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

85-01-8: Pitch, coal tar, high-temp.; Pitch; [The residue from the distillation of high temperature coal tar. A black solid with an approximate softening point from 30 oC to 180 oC (86oF to 356oF). Composed primarily of a complex mixture of three or more membered condensed ring aromatic hydrocarbons.]
Skin Designation (Directive 2004/37/EC)
The substance can be absorbed through the skin.
91-20-3: naphthalene
TWA value 50 mg/m3 ; 10 ppm (OEL (EU))
indicative
Skin Designation (Directive 2004/37/EC)
The substance can be absorbed through the skin.
92-52-4: biphenyl
64742-94-5: Solvent naphtha (petroleum), heavy arom.
133855-98-8: epoxiconazole(ISO)
90-12-0: 1-Methylnaphthalene
91-57-6: 2-Methylnaphthalene
Skin Designation (Directive 2004/37/EC)
The substance can be absorbed through the skin.

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 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): 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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Form:	dispersion	
Colour:	white	
Odour:	strong, aromatic	
Odour threshold:		
	Not determined since harmful by inhalation.	
pH value:	approx. 6 - 8 (water, 10 g/l, 20 °C)	
Melting temperature:	approx. 0 °C Information applies to the solvent.	
onset of boiling:	approx. 100 °C Information applies to the solvent.	
Flash point:		(DIN EN 22719; ISO 2719)
	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:	460 °C	(Directive 92/69/EEC, A.15)
Vapour pressure:	approx. 23 hPa (20 °C) Information applies to the solvent.	
Density:	approx. 1.06 g/cm3 (20 °C)	(OECD Guideline 109)
Relative vapour density (air):		
	not applicable	
Solubility in water:	dispersible (20 °C)	
Partitioning coefficient n-octanol/water (log Kow):		
	not applicable	
Thermal decomposition:	135 °C, 22 kJ/kg, (DSC (OECD 113)) (onset temperature) 315 °C, 210 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. 193 mPa.s (20 °C)	(OECD 114)
Viscosity, kinematic:	152 mm2/s (40 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	

9.2. Other information

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

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.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

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): 500 - 2,000 mg/kg (OECD Guideline 423)

LC50 rat (by inhalation): 2.11 mg/l 4 h (OECD Guideline 403)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. An aerosol was tested.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)

Irritation

Assessment of irritating effects:

Skin contact causes irritation. Not irritating to the eyes. 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: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:
Guinea pig maximization test guinea pig: Skin sensitizing effects were not observed in animal studies. (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: naphthalene
Assessment of mutagenicity:
The substance was not mutagenic in bacteria. The substance was mutagenic in a mammalian cell culture test system. The substance was not mutagenic in a test with mammals. Literature data.

Carcinogenicity

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

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Assessment of carcinogenicity:
Indication of possible carcinogenic effect in animal tests.

Information on: naphthalene
Assessment of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was observed. EU-classification The substance was classified as a group 3 carcinogen by the German MAK-Commission (substances for which a suspicion of a carcinogenic potential exists). IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

Reproductive toxicity

Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Assessment of reproduction toxicity:
The results of animal studies suggest 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.

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Assessment of teratogenicity:
EU-classification The substance caused malformations/developmental toxicity in laboratory animals.

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-yloxymethyl]phenyl}(N-methoxy)carbamate
Assessment of repeated dose toxicity:
After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.

Information on: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Assessment of repeated dose toxicity:
Repeated exposure to large quantities may affect certain organs.

Information on: naphthalene
Assessment of repeated dose toxicity:
The substance may cause damage to the olfactory epithelium after repeated inhalation.

Information on: biphenyl
Assessment of repeated dose toxicity:
The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

Aspiration hazard

No aspiration hazard expected.
The product has not been tested. The statement has been derived from the properties of the individual components.

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.
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:
LC50 (96 h) 0.054 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)

Aquatic invertebrates:
EC50 (48 h) 0.163 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants:
EC50 (72 h) 2.66 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

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: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
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).

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: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
Bioaccumulation potential:
Bioconcentration factor: 59 - 70, Oncorhynchus mykiss (OECD-Guideline 305)
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.

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: epoxiconazole(ISO); (2RS,3SR)-3-(2-chlorophenyl)-2-(4-fluorophenyl)-[(1H-1,2,4-triazol-1-yl)methyl]oxirane
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: 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. 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.

SECTION 13: Disposal Considerations

13.1. 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.

SECTION 14: Transport Information

Land transport

ADR

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

RID

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, ALCOHOLS, ETHOXYLATED, PROPOXYLATED)
Transport hazard class(es):	9, EHSM
Packing group:	III

Environmental hazards:	yes
Special precautions for user:	None known

Inland waterway transport

ADN

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, ALCOHOLS, ETHOXYLATED, PROPOXYLATED)
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:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, ALCOHOLS, ETHOXYLATED, PROPOXYLATED)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	None known

Air transport

IATA/ICAO

UN number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PYRACLOSTROBIN, ALCOHOLS, ETHOXYLATED, PROPOXYLATED)
Transport hazard class(es):	9, EHSM
Packing group:	III

Environmental hazards:	yes
Special precautions for user:	None known

14.1. UN number
See corresponding entries for “UN 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. Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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: 30, 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: E1

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

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
Skin Corr./Irrit.	Skin corrosion/irritation
Carc.	Carcinogenicity
Repr.	Reproductive toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
STOT SE	Specific target organ toxicity — single exposure
Asp. Tox.	Aspiration hazard
Eye Dam./Irrit.	Serious eye damage/eye irritation
Flam. Sol.	Flammable solids
Skin Sens.	Skin sensitization
H315	Causes skin irritation.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H351	Suspected of causing cancer.
H360Df	May damage the unborn child. Suspected of damaging fertility.
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.
H335	May cause respiratory irritation.
H411	Toxic to aquatic life with long lasting effects.
H304	May be fatal if swallowed and enters airways.
H330	Fatal if inhaled.
H412	Harmful to aquatic life with long lasting effects.
H319	Causes serious eye irritation.
H228	Flammable solid.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin
EUH066	Repeated exposure may cause skin dryness or cracking.
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.