

# 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: 13.02.2020

Version: 6.0

Date previous version: 05.09.2017

Previous version: 5.0

Product: **Gemstone**

(ID no. 30412855/SDS\_CPA\_GB/EN)

Date of print 13.02.2020

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

### 1.1. Product identifier

## Gemstone

### 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  
GERMANYContact address:BASF plc  
PO Box 4, Earl Road, Cheadle Hulme,  
Cheadle, Cheshire  
SK8 6QG, UNITED KINGDOM

Telephone: +44 161 485-6222

E-mail address: product-safety-north@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 Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 3 (oral)  
Acute Tox. 4 (Inhalation - mist)  
Skin Sens. 1B  
Carc. 2  
Repr. 1B  
Aquatic Acute 1  
Aquatic Chronic 1

H332, H301, H317, 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 (GHS) in accordance with UK regulations.

Pictogram:



Signal Word:  
Danger

Hazard Statement:

H332	Harmful if inhaled.
H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
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):

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P280	Wear protective gloves/clothing/eye protection.
P271	Use only outdoors or in a well-ventilated area.
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.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P310	Immediately 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.
P301 + P330	IF SWALLOWED: rinse mouth.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

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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Labeling of special preparations (GHS):

EUH208: May produce an allergic reaction. Contains: 1,2-benzisothiazol-3(2H)-one

Restricted to professional users.

EUH066: Repeated exposure may cause skin dryness or cracking.

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

Hazard determining component(s) for labelling: pyraclostrobin (ISO), epoxiconazole(ISO), Solvent naphtha (petroleum), heavy arom., Alcohols, C16-18, ethoxylated propoxylated, 2-methylisothiazol-3(2H)-one

### 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.

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## 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): 7.64 %

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): 6.01 %

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 through C16 and boiling in the range of approximately 165 oC to 290 oC (330 oF to 554 oF).]

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Content (W/W): < 30 % CAS Number: 64742-94-5 REACH registration number: 01-2119451097-39	Asp. Tox. 1 Aquatic Chronic 2 H304, H411 EUH066
Alcohols, C16-18, ethoxylated propoxylated Content (W/W): < 10 % CAS Number: 68002-96-0	Acute Tox. 2 (Inhalation - mist) Aquatic Acute 1 Aquatic Chronic 3 M-factor acute: 1 H330, H412, H400
2-methylnaphthalene Content (W/W): < 10 % 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
Naphthalene, 1-methyl- 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): < 2 % 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

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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): < 0.5 %	Acute Tox. 4 (oral)
CAS Number: 85-01-8	Aquatic Acute 1
EC-Number: 201-581-5	Aquatic Chronic 1
INDEX-Number: 648-055-00-5	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: &gt;= 0.05 %

| 2-methylisothiazol-3(2H)-one

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Content (W/W): < 0.05 %  
CAS Number: 2682-20-4  
EC-Number: 220-239-6  
INDEX-Number: 613-326-00-9

Acute Tox. 2 (Inhalation - dust)  
Acute Tox. 3 (oral)  
Acute Tox. 3 (dermal)  
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): < 3 %  
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.

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

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.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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#### **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.

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### **SECTION 5: Fire-Fighting Measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

water spray, carbon dioxide, foam, dry powder

Unsuitable extinguishing media for safety reasons:

water jet

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

carbon monoxide, hydrogen chloride, hydrogen fluoride, Carbon dioxide, nitrogen oxides, organochloric compounds

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.

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### **SECTION 6: Accidental Release Measures**

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

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray.

#### **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



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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. Remove contaminated clothing and protective equipment before entering eating areas.

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.

Protect from temperatures below: 0 °C

The product can crystallize below the limit temperature.

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

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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

133855-98-8: epoxiconazole(ISO)

TWA value 0.3 mg/m<sup>3</sup> (Recommendation of BASF), Respirable dust

91-57-6:

2-methylnaphthalene

Skin Designation (Directive 2004/37/EC)

The substance can be absorbed through the skin.

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 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.

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## SECTION 9: Physical and Chemical Properties

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

Form: suspension

Colour: off-white

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Odour:	aromatic, moderate odour	
Odour threshold:	Not determined since harmful by inhalation.	
pH value:	approx. 5.5 - 7.5 (1 %(m), 20 °C)	
Freezing point:	approx. -3.2 °C	
boiling temperature:	approx. 100 °C	
Flash point:	No flash point - Measurement made up to the boiling point.	(ASTM D93)
Evaporation rate:	not applicable	
Flammability:	not highly flammable	
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:	473 °C	(Directive 92/69/EEC, A.15)
Vapour pressure:	The product has not been tested.	
Density:	approx. 1.05 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	125 °C, 110 kJ/kg, (DSC (OECD 113)) (onset temperature) 305 °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. 52.7 mPa.s (20 °C, 100 1/s)	(OECD 114)
Viscosity, kinematic:	38.2 mm <sup>2</sup> /s (40 °C)	(OECD 114)

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Explosion hazard: Based on the chemical structure there is no indication of explosive properties.

Fire promoting properties: not fire-propagating (Directive 2004/73/EC, A.21)

## 9.2. Other information

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

#### Acute toxicity

Assessment of acute toxicity:

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

Experimental/calculated data:

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LD50 rat (oral): > 200 - < 300 mg/kg (OECD Guideline 423)

(by inhalation): The product has not been tested. The statement has been derived from the properties of the individual components.

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

No mortality was observed.

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

*Experimental/calculated data:*

*LC50 rat (by inhalation): 0.58 mg/l 4 h (OECD Guideline 403)*

*An aerosol with respirable particles was tested.*

*Information on: Alcohols, C16-18, ethoxylated propoxylated*

*Experimental/calculated data:*

*LC50 rat (by inhalation): > 0.25 - < 0.5 mg/l 4 h*

*An aerosol was tested.*

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Irritation

Assessment of irritating effects:

Not irritating to the skin. 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: Slightly irritating. (OECD Guideline 404)

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

Respiratory/Skin sensitization

Assessment of sensitization:

Sensitization after skin contact possible. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

modified Buehler test guinea pig: Caused skin sensitization 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:*

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*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)

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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-yl]oxymethyl}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.*

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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.

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## **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.

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Toxicity to fish:

LC50 (96 h) 0.074 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203, static)

No observed effect concentration (96 h) 0.036 mg/l, *Oncorhynchus mykiss* (OECD Guideline 203, static)

Aquatic invertebrates:

EC50 (48 h) 0.14 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Aquatic plants:

EC50 (72 h) 5.05 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static)

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

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

*Chronic toxicity to aquatic invertebrates:*

*No observed effect concentration (21 d) 0.004 mg/l, *Daphnia magna* (OECD Guideline 202, part 2, semistatic)*

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

*No observed effect concentration (28 d) 0.00128 mg/l, *Mysidopsis bahia* (OPP 72-4 (EPA-Guideline), Flow through.)*

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

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

*Chronic toxicity to aquatic invertebrates:*

*No observed effect concentration > 0.63 mg/l, *Daphnia magna* (OECD Guideline 202, part 2)*

## 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-yloxymethyl]phenyl}(N-methoxy)carbamate*

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

*Not readily biodegradable (by OECD criteria).*



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*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 (H<sub>2</sub>O):*

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

*Bioaccumulation potential:*

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

*Accumulation in organisms is not to be expected.*

*Information on: 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.*

### 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-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.*

*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.*

### 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.

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### 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

UN number	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN, SOLVENT NAPHTHA)
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,

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N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN,  
SOLVENT NAPHTHA)  
 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 EPOXICONAZOLE, PYRACLOSTROBIN,  
 SOLVENT NAPHTHA)  
 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 EPOXICONAZOLE, PYRACLOSTROBIN,  
 SOLVENT NAPHTHA)  
 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,

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	N.O.S. (contains EPOXICONAZOLE, PYRACLOSTROBIN, SOLVENT NAPHTHA)
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

#### Further information

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).

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## SECTION 15: Regulatory Information

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

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### 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

List entry in regulation: H2

This product is classified under the European CLP Regulation. (United Kingdom)

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.

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## **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 Sens.	Skin sensitization
Carc.	Carcinogenicity
Repr.	Reproductive toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Skin Corr./Irrit.	Skin corrosion/irritation
STOT SE	Specific target organ toxicity — single exposure
Asp. Tox.	Aspiration hazard
Eye Dam./Irrit.	Serious eye damage/eye irritation
Flam. Sol.	Flammable solids
H332	Harmful if inhaled.
H301	Toxic if swallowed.
H317	May cause an allergic skin reaction.
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.
H315	Causes skin irritation.
H331	Toxic if inhaled.

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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.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H228	Flammable solid.
H318	Causes serious eye damage.
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.

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