

# Safety data sheet

Page: 1/16

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

Date / Revised: 18.01.2018

Version: 1.0

Product: **SERCADIS**

(ID no. 30562701/SDS\_CPA\_IE/EN)

Date of print 18.01.2018

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

### 1.1. Product identifier

**SERCADIS**

### 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 A/S  
Kalvebod Brygge 45, 2. sal  
1560 København, DENMARKContact 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

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

Carc. 2

Aquatic Acute 1

Aquatic Chronic 1

H351, 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 IE regulations.

Pictogram:



Signal Word:

Warning

Hazard Statement:

H351	Suspected of causing cancer.
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 Statements (Prevention):

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements (Response):

P308 + P313	IF exposed or concerned: Get medical advice/attention.
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 triple rinsed empty 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; 1,2-benzisothiazolin-3-one

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

Hazard determining component(s) for labelling: Fluxapyroxad

### 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

crop protection product, fungicide, suspension concentrate (SC)

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide

Content (W/W): 26.5 %

CAS Number: 907204-31-3

Carc. 2

Aquatic Acute 1

Aquatic Chronic 1

H351, H400, H410

Sodium alkyl-naphthalenesulfonate, polymer with formaldehyd

Content (W/W): < 5 %

Acute Tox. 3 (Inhalation - vapour)

H319, H315

phenolsulfonic acid-formaldehyde-polycondensate as sodium salt

Content (W/W): < 5 %

Eye Dam./Irrit. 2

Aquatic Chronic 3

H319, H412

EUH208

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

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Content (W/W): < 0.01 %  
CAS Number: 2634-33-5  
EC-Number: 220-120-9  
INDEX-Number: 613-088-00-6

Acute Tox. 4 (oral)  
Skin Corr./Irrit. 2  
Eye Dam./Irrit. 1  
Skin Sens. 1  
Aquatic Acute 1  
M-factor acute: 10  
H318, H315, H302, H317, H400

Specific concentration limit:

Skin Sens. 1: >= 0.05 %

Propane-1,2-diol

Content (W/W): < 10 %  
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.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

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

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

### 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, 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, Carbon dioxide, nitrogen oxides

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

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

### 6.2. Environmental precautions

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

Do not allow contamination of public drains or surface or ground waters. Inform local water plc if spillage enters drains and the Environmental Protection Agency 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.

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

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: -10 °C

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

Protect from temperatures above: 40 °C

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

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

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

TWA value 10 mg/m<sup>3</sup> (OEL (IE)), Particulate

TWA value 470 mg/m<sup>3</sup> ; 150 ppm (OEL (IE)), Total vapour and particulates

Refer to the current schedule of occupational exposure standards published by the Irish HSA. 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: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

**Hand protection:**

Suitable chemical resistant safety gloves (EN 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:	suspension	
Colour:	off-white, pink tint	
Odour:	faint odour, fruity	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 6 - 8 (1 %(m), approx. 20 °C)	(pH Meter)
crystallization temperature:	-5.5 °C	(measured)
Boiling point:	approx. 100 °C	
Flash point:	Information applies to the solvent. > 100 °C No flash point - Measurement made up to the indicated temperature, pilot light extinguishes.	(Directive 92/69/EEC, A.9, closed cup)
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:	> 650 °C	(Directive 92/69/EEC, A.15)
Vapour pressure:	approx. 23 hPa (20 °C)	
Density:	Information applies to the solvent. approx. 1.13 g/cm <sup>3</sup> (approx. 20 °C)	(OECD Guideline 109)
Relative density:	1.131 (20 °C)	(calculated)
Relative vapour density (air):	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Thermal decomposition:	305 °C, 90 kJ/kg, (DSC (OECD 113)) 395 °C, 20 kJ/kg, (DSC (OECD 113))	
Viscosity, dynamic:	39 mPa.s (20 °C, 100 1/s)	(OECD 114)
Explosion hazard:	not explosive	
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 MSDS 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:  
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:  
LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)  
No mortality was observed.

LC50 rat (by inhalation): > 5.9 mg/l 4 h (OECD Guideline 403)  
No mortality was observed. An aerosol with respirable particles was tested.

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)  
No mortality was observed.

#### Irritation

Assessment of irritating effects:  
Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:  
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

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

#### Respiratory/Skin sensitization

Assessment of sensitization:  
There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:  
Buehler test guinea pig: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 406)

#### Germ cell mutagenicity

Assessment of mutagenicity:

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

CarcinogenicityAssessment of carcinogenicity:

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

*Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

Assessment of carcinogenicity:

*Indication of possible carcinogenic effect in animal tests.*

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Reproductive toxicityAssessment of reproduction toxicity:

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

Developmental toxicityAssessment of teratogenicity:

Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. The product has not been tested. The statement has been derived from the properties of the individual components.

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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

Assessment of repeated dose toxicity:

*Adaptive effects were observed after repeated exposure in animal studies.*

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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.

Toxicity to fish:

LC50 (96 h) 0.97 mg/l, Cyprinus carpio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

Nominal concentration.

Aquatic invertebrates:

EC50 (48 h) 109.23 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Nominal concentration.

Aquatic plants:

EC50 (72 h) 13.12 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

Nominal concentration.

EC10 (72 h) 1.72 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

Nominal concentration.

*Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

*Chronic toxicity to fish:*

*No observed effect concentration (33 d) 0.0359 mg/l, Pimephales promelas (OECD Guideline 210, Flow through.)*

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*Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

*Chronic toxicity to aquatic invertebrates:*

*No observed effect concentration (21 d) 0.5 mg/l, Daphnia magna (OECD Guideline 211, semistatic)*

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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: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

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

*Not readily biodegradable (by OECD criteria).*

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### **12.3. Bioaccumulative potential**

Assessment bioaccumulation potential:

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

*Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

*Bioaccumulation potential:*

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

*Does not accumulate in organisms.*

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### **12.4. Mobility in soil**

Assessment transport between environmental compartments:

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

*Information on: fluxapyroxad (ISO); 3-(difluoromethyl)-1-methyl-N-(3',4',5'-trifluorobiphenyl-2-yl)pyrazole-4-carboxamide*

*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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### **12.5. Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### **12.6. Other adverse effects**

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

### **12.7. Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

Must be 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.

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

user:

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 FLUXAPYROXAD)  
Transport hazard class(es): 9, EHS  
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 FLUXAPYROXAD)  
Transport hazard class(es): 9, EHS  
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: 3

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

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

This product may be subject to the Seveso II Directive and amendments if specific threshold tonnages are exceeded.

For further medical advice Doctors should contact the National Poisons Information Centre at Beaumont Hospital, Dublin.

**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:

Carc.	Carcinogenicity
Aquatic Acute	Hazardous to the aquatic environment - acute

Aquatic Chronic	Hazardous to the aquatic environment - chronic
Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
H351	Suspected of causing cancer.
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.
H400	Very toxic to aquatic life.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.
H318	Causes serious eye damage.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
EUH208	May produce an allergic reaction. Contains:

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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