

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



## FKL M ROT

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	07.08.2024	50002029	Date of first issue: 07.08.2024

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

#### 1.1 Product identifier

**Product name** FKL M ROT

##### Other means of identification

**Product code** 50002029

Unique Formula Identifier (UFI) : XER0-H03V-G00H-N01Q

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

**Use of the Substance/Mixture** : Adjuvant for plant protection products

**Recommended restrictions on use** : Use as recommended by the label.  
For professional and industrial use only

#### 1.3 Manufacturer or supplier's details

##### Supplier Address

Cheminova Deutschland GmbH & Co. KG  
Stader Elbstrasse 26  
21683 Stade  
Germany

Telephone: +49 (0) 4141 9204 0

Telefax: +45 (0) 4141 9204 206

E-mail address: datenblatt@fmc.com, SDS-Info@fmc.com .

#### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:  
Germany: +49-69643508409 (CHEMTREC)  
0800-181-7059 (CHEMTREC)

Medical emergency:  
Germany: +49 (0) 551 19240

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1

H317: May cause an allergic skin reaction.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**  
P261 Avoid breathing mist or vapours.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

##### **Response:**

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

##### **Disposal:**

P501 Dispose of contents/container as hazardous waste in accordance with local regulations.

##### **Hazardous components which must be listed on the label:**

disodium 5-acetylamino-4-hydroxy-3-(phenylazo)naphthalene-2,7-disulphonate  
1,2-benzisothiazol-3(2H)-one  
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one  
(3:1)

##### **Additional Labelling**

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
disodium 5-acetylamino-4-hydroxy-3-(phenylazo)naphthalene-2,7-disulphonate	3734-67-6 223-098-9	Skin Sens. 1B; H317	>= 1 - < 10
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 2; H330 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1  specific concentration limit Skin Sens. 1A; H317 >= 0,036 %  Acute toxicity estimate  Acute oral toxicity: 450 mg/kg Acute inhalation toxicity (dust/mist): 0,21	>= 0,036 - < 0,1

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reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	mg/l	>= 0,0002 - < 0,0015
	613-167-00-5	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071	
		M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	
		specific concentration limit Skin Corr. 1C; H314 >= 0,6 % Skin Irrit. 2; H315 0,06 - < 0,6 % Eye Irrit. 2; H319 0,06 - < 0,6 % Skin Sens. 1A; H317 >= 0,0015 % Eye Dam. 1; H318 >= 0,6 %	
		Acute toxicity estimate  Acute oral toxicity: 200 mg/kg Acute inhalation toxicity (dust/mist): 0,33 mg/l Acute dermal toxicity: 87 mg/kg	

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

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|-------------------------|---|
| If inhaled              | : Remove to fresh air.<br>If unconscious, place in recovery position and seek medical advice.<br>If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance. |
| In case of skin contact | : If on clothes, remove clothes.<br>If on skin, rinse well with water.<br>Wash off with soap and plenty of water.<br>Get medical attention immediately if irritation develops and persists.   |
| In case of eye contact  | : Remove contact lenses.<br>Protect unharmed eye.<br>If eye irritation persists, consult a specialist.  |
| If swallowed            | : Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Do not induce vomiting without medical advice.   |

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

- |       |  |
|-------|--|
| Risks | : May cause an allergic skin reaction. |
|-------|--|

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

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|-----------|---|
| Treatment | : Treat symptomatically.<br>Immediate medical attention is required in case of ingestion. |
|-----------|---|
- 

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

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|--------------------------------|--|
| Suitable extinguishing media   | : Dry chemical, CO <sub>2</sub> , water spray or regular foam.     |
| Unsuitable extinguishing media | : Do not spread spilled material with high-pressure water streams. |

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

- |                                       |   |
|---------------------------------------|---|
| Specific hazards during fire-fighting | : Do not allow run-off from fire fighting to enter drains or water courses.                     |
| Hazardous combustion products         | : Fire may produce irritating, corrosive and/or toxic gases.<br>Carbon oxides<br>Sulphur oxides |

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### 5.3 Advice for firefighters

- |   |   |   |
|---|---|---|
| Special protective equipment for firefighters | : | Wear self-contained breathing apparatus for firefighting if necessary.  |
| Further information                           | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

## SECTION 6: Accidental release measures

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

- |                      |   |   |
|----------------------|---|---|
| Personal precautions | : | Use personal protective equipment.<br>If it can be safely done, stop the leak.<br>Keep people away from and upwind of spill/leak.<br>Remove all sources of ignition.<br>Immediately evacuate personnel to safe areas.<br>Ensure adequate ventilation.<br>Never return spills in original containers for re-use.<br>Mark the contaminated area with signs and prevent access to unauthorized personnel.<br>Only qualified personnel equipped with suitable protective equipment may intervene. |
|----------------------|---|---|

### 6.2 Environmental precautions

- |                           |   |  |
|---------------------------|---|--|
| Environmental precautions | : | Prevent product from entering drains.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
|---------------------------|---|--|

### 6.3 Methods and material for containment and cleaning up

- |                         |   |  |
|-------------------------|---|--|
| Methods for cleaning up | : | Wipe up with absorbent material (e.g. cloth, fleece).<br>Keep in suitable, closed containers for disposal. |
|-------------------------|---|--|

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- |   |   |  |
|---|---|--|
| Advice on safe handling                         | : | For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area. |
| Advice on protection against fire and explosion | : | Normal measures for preventive fire protection.  |
| Hygiene measures                                | : | General industrial hygiene practice.   |

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### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage : No materials to be especially mentioned.

Storage class (TRGS 510) : 10

Recommended storage temperature : 5 - 35 °C

Further information on storage stability : No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

Specific use(s) : The product may be used as adjuvant for plant protection products only.  
Use only in accordance with the instruction manual.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	MAK (inhalable fraction)	0,2 mg/m <sup>3</sup>	DE DFG MAK
Further information: Danger of sensitization of the skin, Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed				

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6,81 mg/m <sup>3</sup>
	Workers	Dermal	Long-term systemic effects	0,966 mg/kg
	Consumers	Inhalation	Long-term systemic effects	1,2 mg/m <sup>3</sup>
	Consumers	Dermal	Long-term systemic effects	0,345 mg/kg

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reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Workers	Inhalation	Long-term local effects	0,02 mg/m3
	Workers	Inhalation	Acute local effects	0,04 mg/m3
	Consumers	Inhalation	Long-term local effects	0,02 mg/m3
	Consumers	Inhalation	Acute local effects	0,04 mg/m3
	Consumers	Oral	Long-term systemic effects	0,09 mg/kg
	Consumers	Oral	Acute systemic effects	0,11 mg/kg

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
1,2-benzisothiazol-3(2H)-one	Fresh water	0,00403 mg/l
	Marine water	0,000403 mg/l
	Sewage treatment plant	1,03 mg/l
	Fresh water sediment	0,0499 mg/l
	Marine sediment	0,00499 mg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Fresh water	0,00339 mg/l
	Intermittent use/release	0,00339 mg/l
	Marine water	0,00339 mg/l
	Sewage treatment plant	0,23 mg/l
	Fresh water sediment	0,027 mg/kg
	Marine sediment	0,027 mg/kg

## 8.2 Exposure controls

### Personal protective equipment

Eye/face protection : Eye wash bottle with pure water  
Tightly fitting safety goggles

Hand protection  
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Protective suit  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Protective measures : Plan first aid action before beginning work with this product.  
Always have on hand a first-aid kit, together with proper in-



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structions.  
Wear suitable protective equipment.  
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: red
Odour	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Flash point	: > 100 °C Method: Directive 67/548/EEC, Annex V, A.9.
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
pH	: ca. 5 - 6
Viscosity	
Viscosity, kinematic	: No data available
Solubility(ies)	
Water solubility	: dispersible
Partition coefficient: n-octanol/water	: Not available for this mixture.
Vapour pressure	: Not available for this mixture.
Density	: ca. 1,085 g/cm <sup>3</sup> (20 °C)
Relative vapour density	: No data available
Particle characteristics	
Particle size	: Not applicable

### 9.2 Other information

Explosives	: Not explosive
Oxidizing properties	: Non-oxidizing

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### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No decomposition if stored and applied as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

#### 10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

#### 10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

#### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

### SECTION 11: Toxicological information

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

##### Acute toxicity

Based on available data, the classification criteria are not met.

##### Components:

##### **disodium 5-acetylamino-4-hydroxy-3-(phenylazo)naphthalene-2,7-disulphonate:**

Acute oral toxicity : LD50 (Mouse, male): > 5.000 mg/kg  
Method: OECD Test Guideline 401

##### **1,2-benzisothiazol-3(2H)-one:**

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg  
Method: OECD Test Guideline 401

Acute toxicity estimate: 450 mg/kg  
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008  
Remarks: Based on EU Harmonised classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

Acute inhalation toxicity : Acute toxicity estimate: 0,21 mg/l  
Test atmosphere: dust/mist  
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008  
Remarks: Based on EU Harmonised classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

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Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity

### **reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):**

Acute oral toxicity : LD50 Oral (Rat, female): 200 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat, male and female): 0,33 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rabbit, male): 87 mg/kg

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

#### **Components:**

##### **1,2-benzisothiazol-3(2H)-one:**

Species : Rabbit  
Exposure time : 72 h  
Method : OECD Test Guideline 404  
Result : No skin irritation

### **reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):**

Method : OECD Test Guideline 404  
Result : Corrosive after 1 to 4 hours of exposure

### **Serious eye damage/eye irritation**

Based on available data, the classification criteria are not met.

#### **Components:**

##### **1,2-benzisothiazol-3(2H)-one:**

Species : Bovine cornea  
Method : OECD Test Guideline 437  
Result : No eye irritation

Species : Rabbit  
Method : EPA OPP 81-4  
Result : Irreversible effects on the eye

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### reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Result : Irreversible effects on the eye

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Based on available data, the classification criteria are not met.

### Components:

#### disodium 5-acetyl-amino-4-hydroxy-3-(phenylazo)naphthalene-2,7-disulphonate:

Assessment : The product is a skin sensitiser, sub-category 1B.

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

Test Type : Maximisation Test  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : May cause sensitisation by skin contact.

Species : Guinea pig  
Method : FIFRA 81.06  
Result : May cause sensitisation by skin contact.

### reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Test Type : Local lymph node assay (LLNA)  
Species : Mouse  
Result : The product is a skin sensitiser, sub-category 1A.

### Germ cell mutagenicity

Based on available data, the classification criteria are not met.

### Components:

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

Genotoxicity in vitro : Test Type: gene mutation test  
Test system: mouse lymphoma cells  
Metabolic activation: with and without metabolic activation  
Method: OECD Test Guideline 476  
Result: negative

Test Type: Ames test  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473

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Result: positive

Genotoxicity in vivo : Test Type: unscheduled DNA synthesis assay  
Species: Rat (male)  
Cell type: Liver cells  
Application Route: Ingestion  
Exposure time: 4 h  
Method: OECD Test Guideline 486  
Result: negative

Test Type: Micronucleus test  
Species: Mouse  
Application Route: Oral  
Method: OECD Test Guideline 474  
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

### Carcinogenicity

Based on available data, the classification criteria are not met.

### Reproductive toxicity

Based on available data, the classification criteria are not met.

### Components:

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

Effects on fertility : Species: Rat, male  
Application Route: Ingestion  
General Toxicity - Parent: NOAEL: 18,5 mg/kg body weight  
General Toxicity F1: NOAEL: 48 mg/kg body weight  
Fertility: NOAEL: 112 mg/kg bw/day  
Symptoms: No effects on reproduction parameters  
Method: OPPTS 870.3800  
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

### STOT - single exposure

Based on available data, the classification criteria are not met.

### STOT - repeated exposure

Based on available data, the classification criteria are not met.

### Components:

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

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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### Repeated dose toxicity

#### Components:

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

Species	: Rat, male and female
NOAEL	: 15 mg/kg
Application Route	: Ingestion
Exposure time	: 28 d
Method	: OECD Test Guideline 407
Symptoms	: Irritation

Species	: Rat, male and female
NOAEL	: 69 mg/kg
Application Route	: Ingestion
Exposure time	: 90 d
Symptoms	: Irritation, Reduced body weight

##### reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Species	: Dog
NOAEL	: 22 mg/kg
Application Route	: Oral

Species	: Rat
NOAEL	: 16,3 - 24,7 mg/kg
Application Route	: Skin contact

Species	: Rat
NOAEL	: 2.36 mg/m <sup>3</sup>
Application Route	: Inhalation

### Aspiration toxicity

Based on available data, the classification criteria are not met.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment	: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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### Further information

#### Product:

Remarks	: No data available
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### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Components:

##### **1,2-benzisothiazol-3(2H)-one:**

- |   |   |  |
|---|---|--|
| Toxicity to fish                                    | : | LC50 (Cyprinodon variegatus (sheepshead minnow)): 16,7 mg/l<br>Exposure time: 96 h<br>Test Type: static test<br><br>LC50 (Oncorhynchus mykiss (rainbow trout)): 2,15 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203                                    |
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 2,9 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: OECD Test Guideline 202  |
| Toxicity to algae/aquatic plants                    | : | EC50 (Pseudokirchneriella subcapitata (green algae)): 0,070 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201<br><br>NOEC (Pseudokirchneriella subcapitata (green algae)): 0,04 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201            |
| M-Factor (Acute aquatic toxicity)                   | : | 1  |
| Toxicity to microorganisms                          | : | EC50 (activated sludge): 24 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209<br><br>EC50 (activated sludge): 12,8 mg/l<br>Exposure time: 3 h<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209 |
| M-Factor (Chronic aquatic toxicity)                 | : | 1  |

##### **reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):**

- |                  |   |  |
|------------------|---|--|
| Toxicity to fish | : | LC50 (Oncorhynchus mykiss (rainbow trout)): 0,19 mg/l<br>Exposure time: 96 h<br>GLP: yes |
|------------------|---|--|

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Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,16 mg/l Exposure time: 48 h  NOEC (Daphnia magna (Water flea)): 0,1 mg/l Exposure time: 21 d  EC50 (Daphnia magna (Water flea)): 0,18 mg/l Exposure time: 21 d
Toxicity to algae/aquatic plants	:	NOEC (Skeletonema costatum (marine diatom)): 0,00049 mg/l Exposure time: 48 h Method: OECD Test Guideline 201  NOEC (Skeletonema costatum (marine diatom)): 0,019 mg/l Exposure time: 72 h Method: OECD Test Guideline 201  EC50 (Skeletonema costatum (marine diatom)): 0,037 mg/l Exposure time: 48 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to microorganisms	:	NOEC (activated sludge): 0,91 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes  EC50 (activated sludge): 4,5 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,02 mg/l Exposure time: 35 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)  Chronic Toxicity Value: 0,18 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	100



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### 12.2 Persistence and degradability

#### Components:

##### **1,2-benzisothiazol-3(2H)-one:**

Biodegradability : Result: rapidly biodegradable  
Method: OECD Test Guideline 301C

##### **reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):**

Biodegradability : Result: Readily biodegradable.

### 12.3 Bioaccumulative potential

#### Components:

##### **1,2-benzisothiazol-3(2H)-one:**

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)  
Exposure time: 56 d  
Bioconcentration factor (BCF): 6,62  
Method: OECD Test Guideline 305  
Remarks: Substance is not persistent, bioaccumulative, and toxic (PBT).

Partition coefficient: n-octanol/water : log Pow: 0,7 (20 °C)  
pH: 7  
  
log Pow: 0,99 (20 °C)  
pH: 5

##### **reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):**

Bioaccumulation : Exposure time: 28 d  
Bioconcentration factor (BCF): < 54  
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : Pow: 0,75

### 12.4 Mobility in soil

#### Components:

##### **1,2-benzisothiazol-3(2H)-one:**

Distribution among environmental compartments : Koc: 9,33 ml/g, log Koc: 0,97  
Method: OECD Test Guideline 121  
Remarks: Highly mobile in soils

### 12.5 Results of PBT and vPvB assessment

#### Product:

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Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

#### Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Do not re-use empty containers.  
Packaging that is not properly emptied must be disposed of as the unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA	: Not regulated as a dangerous good

### 14.2 UN proper shipping name

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ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA	: Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA	: Not regulated as a dangerous good

### 14.4 Packing group

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA (Cargo)	: Not regulated as a dangerous good
IATA (Passenger)	: Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks	: Not classified as dangerous in the meaning of transport regulations.
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### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Conditions of restriction for the following entries should be considered: Number on list 75, 3
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If you intend to use this product as tattoo ink, please contact your vendor.

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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

Water hazard class (Germany) : WGK 3 highly hazardous to water  
Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.1: Total dust:  
Not applicable  
5.2.2: Inorganic substances in powdered form:  
Not applicable  
5.2.4: Inorganic substances in gaseous form:  
Not applicable  
5.2.5: Organic Substances:  
Not applicable  
5.2.7.1.1: Carcinogenic substance:  
Not applicable  
5.2.7.1.1: Quartz fine dust PM4:  
Not applicable  
5.2.7.1.1: Formaldehyde:  
Not applicable  
5.2.7.1.1: fibres:  
Not applicable  
5.2.7.1.2: Germ cell mutagens:  
Not applicable  
5.2.7.1.3: Substances toxic to reproduction:  
Not applicable  
5.2.7.2: Poorly degradable, easily enrichable and highly toxic organic substances:  
Not applicable

**Other regulations:**

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Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

### The components of this product are reported in the following inventories:

TCSI	: Not in compliance with the inventory
TSCA	: Product contains substance(s) not listed on TSCA inventory.
AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.  Dispersing agent for pigment pastes 2,2-dibromo-2-cyanoacetamide
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Not in compliance with the inventory
NZIoC	: Not in compliance with the inventory
TECI	: Not in compliance with the inventory

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

## SECTION 16: Other information

### Full text of H-Statements

H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
H310	: Fatal in contact with skin.
H314	: Causes severe skin burns and eye damage.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H330	: Fatal if inhaled.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
EUH071	: Corrosive to the respiratory tract.

### Full text of other abbreviations

Acute Tox.	: Acute toxicity
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Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
DE DFG MAK	:	Germany. MAK BAT Annex IIa
DE DFG MAK / MAK	:	MAK value

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Skin Sens. 1

H317

#### Classification procedure:

Calculation method

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