

Safety Data Sheet

according to UK REACH Regulation

replaces vers.frm: 23.03.2021

MIXOL® Nr. 3 Oxyd-Rehbraun

Revision date: 06.04.2022

Product code: PES54

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

1.1. Product identifier

MIXOL® Nr. 3 Oxyd-Rehbraun

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name: MIXOL-PRODUKTE Diebold GmbH
Street: Carl-Zeiss-Str. 17-19
Place: D-73230 Kirchheim/Teck
Telephone: +49/(0)7021 / 950090 Telefax: +49/(0)7021 / 56030
e-mail:
e-mail (Contact person): Technik@mixol.de
Internet:
Responsible Department: Technik

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5
-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce
an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditionsstorage stability: ≥ 36 month(s)**7.3. Specific end use(s)**

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
			10		STEL (15 min)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
			2		STEL (15 min)	WEL
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL
-	Manganese: its inorganic compounds (as Mn, respirable fraction)	-	0.05		TWA (8 h)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)	
Colour:	brown	
Odour:	odourless	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flash point:		> 100 °C

Flammability

Solid:		not applicable
Gas:		not applicable

Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		> 100 °C
Vapour pressure:		not determined
Density (at 20 °C):		1,65 g/cm ³
Water solubility:		miscible

Solubility in other solvents

not determined		
Partition coefficient n-octanol/water:		not determined
Viscosity / kinematic:		not determined
Relative vapour density:		not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 34 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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

1.1. Product identifier

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name: MIXOL-PRODUKTE Diebold GmbH
Street: Carl-Zeiss-Str. 17-19
Place: D-73230 Kirchheim/Teck
Telephone: +49/(0)7021 / 950090 Telefax: +49/(0)7021 / 56030
e-mail: [REDACTED]
e-mail (Contact person): Technik@mixol.de
Internet: [REDACTED]
Responsible Department: Technik

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5
-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce
an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			15 - < 20 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

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5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
		-	10		STEL (15 min)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

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Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)	
Colour:	red	
Odour:	odourless	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flash point:		> 100 °C

Flammability

Solid:		not applicable
Gas:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		> 100 °C
Vapour pressure:		not determined
Density (at 20 °C):		1,59 g/cm ³
Water solubility:		miscible
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Viscosity / kinematic:		not determined
Relative vapour density:		not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

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10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 mg/kg	670 - 784	Rat	Manufacturer OECD 401
	dermal	LD50 mg/kg	> 2000	Rat	Manufacturer
	inhalation vapour	ATE	0,5 mg/l		
	inhalation (4 h) dust/mist	LC50	0,5 mg/l	Rat	Manufacturer OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50	64 mg/kg	Rat	Manufacturer
	dermal	LD50 mg/kg	92,4	Rabbit	Manufacturer
	inhalation vapour	ATE	0,5 mg/l		
	inhalation (4 h) dust/mist	LC50	0,171 mg/l	Rat	Manufacturer

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

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Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 50 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

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15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

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.

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H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

MIXOL® Nr. 5 Oxyd-Ocker

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician. After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

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Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)
Colour:	yellow
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	1,69 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 17 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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

1.1. Product identifier

MIXOL® Nr. 14 Oxyd-Grün

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			5 - < 10 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.**Unsuitable extinguishing media**

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

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5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL
-	Chromium (III) compounds (as Cr)	-	0.5		TWA (8 h)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

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Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)	
Colour:	green	
Odour:	odourless	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flash point:		> 100 °C

Flammability

Solid:		not applicable
Gas:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		> 100 °C
Vapour pressure:		not determined
Density (at 20 °C):		1,69 g/cm ³
Water solubility:		miscible
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Viscosity / kinematic:		not determined
Relative vapour density:		not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

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10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 mg/kg 670 - 784	Rat	Manufacturer	OECD 401
	dermal	LD50 mg/kg > 2000	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 mg/kg 92,4	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 mg/l 0,171	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

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Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

2004/42/EC (VOC): < 26 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

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15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Abbreviations and acronyms**

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Relevant H and EUH statements (number and full text)

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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

MIXOL® Nr. 19 Oxyd-Kamel

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
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2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: \geq 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
			10		STEL (15 min)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
			2		STEL (15 min)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)
Colour:	brown
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	1,68 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 21 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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

1.1. Product identifier

MIXOL® Nr. 20 Oxyd-Kastanie

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name: MIXOL-PRODUKTE Diebold GmbH
Street: Carl-Zeiss-Str. 17-19
Place: D-73230 Kirchheim/Teck
Telephone: +49/(0)7021 / 950090 Telefax: +49/(0)7021 / 56030
e-mail:
e-mail (Contact person): Technik@mixol.de
Internet:
Responsible Department: Technik

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5
-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce
an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 0.1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
			10		STEL (15 min)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
			2		STEL (15 min)	WEL
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL
-	Manganese: its inorganic compounds (as Mn, respirable fraction)	-	0.05		TWA (8 h)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)
Colour:	brown
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	1,65 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 35 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P501	Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
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2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
			10		STEL (15 min)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
			2		STEL (15 min)	WEL
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL
-	Manganese: its inorganic compounds (as Mn, respirable fraction)	-	0.05		TWA (8 h)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)
Colour:	brown
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	1,9 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 22 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			10 - < 15 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
1309-37-1	Iron oxide, fume (as Fe)	-	5		TWA (8 h)	WEL
			10		STEL (15 min)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
			2		STEL (15 min)	WEL
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL
-	Manganese: its inorganic compounds (as Mn, respirable fraction)	-	0.05		TWA (8 h)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)	
Colour:	grey	
Odour:	odourless	
pH-Value:		not determined
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flash point:		> 100 °C
Flammability		
Solid:		not applicable
Gas:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		> 100 °C
Vapour pressure:		not determined
Density (at 20 °C):		2,0 g/cm ³
Water solubility:		miscible
Solubility in other solvents		
		not determined
Partition coefficient n-octanol/water:		not determined
Viscosity / kinematic:		not determined
Relative vapour density:		not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 16 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH		
Street:	Carl-Zeiss-Str. 17-19		
Place:	D-73230 Kirchheim/Teck		
Telephone:	+49/(0)7021 / 950090	Telefax:	+49/(0)7021 / 56030
e-mail:	[REDACTED]		
e-mail (Contact person):	Technik@mixol.de		
Internet:	[REDACTED]		
Responsible Department:	Technik		

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard statements**

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			5 - < 10 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Manganese: its inorganic compounds (as Mn, inhalable fraction)	-	0.2		TWA (8 h)	WEL
-	Manganese: its inorganic compounds (as Mn, respirable fraction)	-	0.05		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)
Colour:	black
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	2,36 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 1 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301 Toxic if swallowed.
 H302 Harmful if swallowed.
 H310 Fatal in contact with skin.
 H311 Toxic 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.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.
 EUH071 Corrosive to the respiratory tract.
 EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5
 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce
 an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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

1.1. Product identifier

MIXOL® Nr. 30 Oxyd-Brillant-Gelb

Product group: Zwischenprodukt

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name: MIXOL-PRODUKTE Diebold GmbH
Street: Carl-Zeiss-Str. 17-19
Place: D-73230 Kirchheim/Teck
Telephone: +49/(0)7021 / 950090 Telefax: +49/(0)7021 / 56030
e-mail:
e-mail (Contact person): Technik@mixol.de
Internet:
Responsible Department: Technik

1.4. Emergency telephone number: Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			5 - < 10 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm			5 - < 10 %
	237-898-0		01-2119486965-17	
	STOT RE 2; H373			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

Unsuitable extinguishing media

Full water jet

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5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL values

CAS No	Substance			
DNEL type	Exposure route	Effect	Value	
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm			
Worker DNEL, long-term	inhalation	local	0,02 mg/m ³	
Worker DNEL, long-term	inhalation	systemic	6,81 mg/m ³	
Consumer DNEL, long-term	dermal	systemic	0,966 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	local	0,005 mg/m ³	
Consumer DNEL, long-term	oral	systemic	20 mg/kg bw/day	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term	inhalation	systemic	6,81 mg/m ³	
Worker DNEL, long-term	dermal	systemic	0,966 mg/kg bw/day	
Consumer DNEL, long-term	inhalation	systemic	1,2 mg/m ³	
Consumer DNEL, long-term	dermal	systemic	0,345 mg/kg bw/day	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term	inhalation	local	0,02 mg/m ³	
Worker DNEL, acute	inhalation	local	0,04 mg/m ³	
Consumer DNEL, long-term	inhalation	local	0,02 mg/m ³	
Consumer DNEL, acute	inhalation	local	0,04 mg/m ³	
Consumer DNEL, long-term	oral	systemic	0,11 mg/kg bw/day	
Consumer DNEL, acute	oral	systemic	0,09 mg/kg bw/day	

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PNEC values

CAS No	Substance	Value
Environmental compartment		
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm	
Micro-organisms in sewage treatment plants (STP)		10000 mg/l
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is

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recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)
Colour:	yellow
Odour:	odourless
pH-Value:	not determined

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C

Flammability

Solid:	not applicable
Gas:	not applicable

Explosive properties

The product is not: Explosive.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	> 100 °C
----------------------------	----------

Oxidizing properties

Not oxidising.

Vapour pressure:	not determined
Density (at 20 °C):	2,01 g/cm ³
Water solubility:	miscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined
Evaporation rate:	not determined

9.2. Other information

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No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm				
	oral	LD50 > 5000 mg/kg	Rat	Manufacturer	OECD 401
	inhalation (4 h) dust/mist	LC50 > 5,1 mg/l	Rat	Manufacturer	OECD 403
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

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Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm					
	Acute fish toxicity	LC50 > 10000 mg/l	96 h	Danio rerio (zebrafish)	Manufacturer	OECD 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Desmodesmus subspicatus	Manufacturer	OECD 201
	Acute crustacea toxicity	EC50 > 100 mg/l	48 h	Daphnia pulex (water flea)	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 0,155 mg/l	72 h	Selenastrum capricornutum	Manufacturer	OECD 201
	Fish toxicity	NOEC 0,21 mg/l	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	OECD 215
	Acute bacteria toxicity	(EC50 23 mg/l)	3 h	Activated sludge	Manufacturer	OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 7,92 mg/l)	3 h	Activated sludge	Manufacturer	OECD 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
14059-33-7	Bismuth vanadium tetraoxide, particle size <10 µm	< 14	Oryzias latipes (Ricefish)	Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

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Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

2004/42/EC (VOC): < 0,1 %
 Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
 Water hazard class (D): 3 - highly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route

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(European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Relevant H and EUH statements (number and full text)

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.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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

1.1. Product identifier

MIXOL® Nr. 31 Oxyd-Brillant-Grün

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

Use of the substance/mixture

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name: MIXOL-PRODUKTE Diebold GmbH
Street: Carl-Zeiss-Str. 17-19
Place: D-73230 Kirchheim/Teck
Telephone: +49/(0)7021 / 950090 Telefax: +49/(0)7021 / 56030
e-mail:
e-mail (Contact person): Technik@mixol.de
Internet:
Responsible Department: Technik

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5
-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce
an allergic reaction.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			5 - < 10 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
112-02-7	Cetrimonium chloride			< 1 %
	203-928-6			
	Acute Tox. 3, Acute Tox. 4, Skin Corr. 1C, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 1; H311 H302 H314 H318 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixtureNon-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Cobalt and cobalt compounds (as Co)	-	0.1		TWA (8 h)	WEL
-	Nickel and its inorganic compounds (except nickel tetracarbonyl): nickel and water-insoluble nickel compounds (as Ni)	-	0.5		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
112-02-7	Cetrimonium chloride			
Worker DNEL, long-term		inhalation	systemic	3,32 mg/m ³
Worker DNEL, long-term		dermal	systemic	4,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,98 mg/m ³
Consumer DNEL, long-term		dermal	systemic	2,83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,83 mg/kg bw/day
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
Worker DNEL, long-term		inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term		dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			
Worker DNEL, long-term		inhalation	local	0,02 mg/m ³
Worker DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		inhalation	local	0,02 mg/m ³
Consumer DNEL, acute		inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term		oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,09 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
112-02-7	Cetrimonium chloride	
Freshwater		0,00063 mg/l
Freshwater (intermittent releases)		0,0008 mg/l
Marine water		0,000068 mg/l
Freshwater sediment		9,27 mg/kg
Marine sediment		0,927 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,4 mg/l
Soil		7 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater		0,00403 mg/l
Freshwater (intermittent releases)		0,0011 mg/l
Marine water		0,000403 mg/l
Marine water (intermittent releases)		0,0011 mg/l
Freshwater sediment		0,0499 mg/kg
Marine sediment		0,00499 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,03 mg/l
Soil		3 mg/kg
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater		0,00339 mg/l
Freshwater (intermittent releases)		0,00339 mg/l
Marine water		0,00339 mg/l
Marine water (intermittent releases)		0,00339 mg/l
Freshwater sediment		0,027 mg/kg
Marine sediment		0,027 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l
Soil		0,01 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

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Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid (Dispersion)
Colour:	green
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	2,04 g/cm ³
Water solubility:	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Viscosity / kinematic:	not determined
Relative vapour density:	not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-02-7	Cetrimonium chloride				
	oral	LD50 699 mg/kg	Rat	Manufacturer	
	dermal	LD50 528 mg/kg	Rabbit	Manufacturer	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
112-02-7	Cetrimonium chloride					
	Acute algae toxicity	ErC50 mg/l	0,08	72 h	Pseudokirchneriella subcapitata	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,09	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	Crustacea toxicity	NOEC mg/l	0,0068	21 d	Daphnia magna (Big water flea)	Manufacturer OECD 211
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-02-7	Cetrimonium chloride			
	OECD 301B	93,5 %	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-02-7	Cetrimonium chloride	3,08
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
112-02-7	Cetrimonium chloride	70,8		Manufacturer
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC): < 19 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 3 - highly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

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LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic 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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Colour, Pigment

1.3. Details of the supplier of the safety data sheet

Company name:	MIXOL-PRODUKTE Diebold GmbH	
Street:	Carl-Zeiss-Str. 17-19	
Place:	D-73230 Kirchheim/Teck	
Telephone:	+49/(0)7021 / 950090	Telefax: +49/(0)7021 / 56030
e-mail:	[REDACTED]	
e-mail (Contact person):	Technik@mixol.de	
Internet:	[REDACTED]	
Responsible Department:	Technik	

1.4. Emergency telephone number:

Emergency CONTACT (24 h) GBK GmbH +49/(0)6132 / 84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements**GB CLP Regulation****Special labelling of certain mixtures**

EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
68920-66-1	Alcohols, C16-18 and C18-unsatd., ethoxylated			5 - < 10 %
	500-236-9			
	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 3; H315 H400 H412			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2; H330 H302 H315 H318 H317 H400 H411			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.1 %
	-	613-167-00-5	01-2120764691-48	
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical advice/attention.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. @0405.B004145 Get medical advice/attention.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.
Water spray jet, Extinguishing powder, Carbon dioxide (CO₂), alcohol resistant foam.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

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5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes. Do not breathe dust/fume/gas/mist/vapours/spray. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention. Keep away from sources of ignition - No smoking.

Further information on handling

Handle and open container with care.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

No information available.

Further information on storage conditions

storage stability: >= 36 month(s)

7.3. Specific end use(s)

Colour, Pigment

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
-	Cobalt and cobalt compounds (as Co)	-	0.1		TWA (8 h)	WEL

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one		
Worker DNEL, long-term	inhalation	systemic	6,81 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,2 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,345 mg/kg bw/day
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)		
Worker DNEL, long-term	inhalation	local	0,02 mg/m ³
Worker DNEL, acute	inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term	inhalation	local	0,02 mg/m ³
Consumer DNEL, acute	inhalation	local	0,04 mg/m ³
Consumer DNEL, long-term	oral	systemic	0,11 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,09 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment	Value	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	
Freshwater	0,00403 mg/l	
Freshwater (intermittent releases)	0,0011 mg/l	
Marine water	0,000403 mg/l	
Marine water (intermittent releases)	0,0011 mg/l	
Freshwater sediment	0,0499 mg/kg	
Marine sediment	0,00499 mg/kg	
Micro-organisms in sewage treatment plants (STP)	1,03 mg/l	
Soil	3 mg/kg	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	
Freshwater	0,00339 mg/l	
Freshwater (intermittent releases)	0,00339 mg/l	
Marine water	0,00339 mg/l	
Marine water (intermittent releases)	0,00339 mg/l	
Freshwater sediment	0,027 mg/kg	
Marine sediment	0,027 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,23 mg/l	
Soil	0,01 mg/kg	

8.2. Exposure controls



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Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Protective and hygiene measures

Take off contaminated clothing and wash it before reuse. Wash hands before breaks and after work. Draw up and observe skin protection programme. Use protective skin cream before handling the product. When using do not eat, drink, smoke, sniff.

Eye/face protection

Wear eye/face protection.

Hand protection

Wear protective gloves.

Suitable material: NBR (Nitrile rubber)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid (Dispersion)
Colour:	blue
Odour:	odourless
pH-Value:	not determined
Changes in the physical state	
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	100 °C
Flash point:	> 100 °C
Flammability	
Solid:	not applicable
Gas:	not applicable
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	> 100 °C
Vapour pressure:	not determined
Density (at 20 °C):	1,99 g/cm ³
Water solubility:	miscible

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Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

not determined

Viscosity / kinematic:

not determined

Relative vapour density:

not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NO_x).**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

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

ATEmix calculated:

oral: > 2000 mg/kg

dermal: > 2000 mg/kg

Inhalation (vapour): >20 mg/L (4 h)

Inhalation (dust/mist): > 5 mg/L (4h)

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one				
	oral	LD50 670 - 784 mg/kg	Rat	Manufacturer	OECD 401
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,5 mg/l	Rat	Manufacturer	OPPTS 870.1300
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 64 mg/kg	Rat	Manufacturer	
	dermal	LD50 92,4 mg/kg	Rabbit	Manufacturer	
	inhalation vapour	ATE 0,5 mg/l			
	inhalation (4 h) dust/mist	LC50 0,171 mg/l	Rat	Manufacturer	

Irritation and corrosivity

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

Skin corrosion/irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 404

Test was carried out with a similar formulation. (By analogy.)

Serious eye damage/eye irritation:

Result / Evaluation: non-irritant. (Rabbit)

Method: OECD 405

Test was carried out with a similar formulation. (By analogy.)

Sensitising effects

Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

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.

Aspiration hazard

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

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one					
	Acute algae toxicity	ErC50 mg/l	0,155	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Fish toxicity	NOEC mg/l	0,21	28 d	Oncorhynchus mykiss (Rainbow trout)	Manufacturer OECD 215
	Acute bacteria toxicity	(EC50 mg/l)	23	3 h	Activated sludge	Manufacturer OECD 209
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)					
	Acute bacteria toxicity	(EC50 mg/l)	7,92	3 h	Activated sludge	Manufacturer OECD 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-0,71 - 0,75

BCF

CAS No	Chemical name	BCF	Species	Source
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	6,62	Lepomis macrochirus (Bluegill)	Manufacturer
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	3,6		Manufacturer

12.4. Mobility in soil

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

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Inland waterways transport (ADN)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

2004/42/EC (VOC): < 0,1 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

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CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Relevant H and EUH statements (number and full text)

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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one, reaction mass of 5 -chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)