

# Safety Data Sheet

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 1 of 12

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

MIXOL® Nr. 12 Tannengrün

**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:	info@mixol.de	
E-mail (Contact person):	Technik@mixol.de	
Internet:	www.mixol.de	
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**

# Safety Data Sheet

according to UK REACH Regulation

## MIXOL® Nr. 12 Tannengrün

Revision date: 03.07.2025

Product code: PES87

Page 2 of 12

### Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (GB CLP Regulation)	
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	
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	< 0.036 %
	220-120-9	613-088-00-6
	01-2120761540-60	
	Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H302 H315 H318 H317 H400 H410	
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0.0015 %
	-	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.

### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
68920-66-1	500-236-9	Alcohols, C16-18 and C18-unsatd., ethoxylated	10 - < 15 %
		Aquatic Acute 1; H400: M=1	
2634-33-5	220-120-9	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	< 0.036 %
		inhalation: ATE 0,21 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: ATE 450 mg/kg Skin Sens. 1A; H317: >= 0,036 - 100 Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1	
55965-84-9	-	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	< 0.0015 %
		inhalation: ATE = 0,5 mg/l (vapours); inhalation: LC50 = 0,171 mg/l (dusts or mists); dermal: LD50 = 92,4 mg/kg; oral: LD50 = 64 mg/kg Skin Corr. 1C; H314: >= 0,6 - 100 Skin Irrit. 2; H315: >= 0,06 - < 0,6 Eye Dam. 1; H318: >= 0,6 - 100 Eye Irrit. 2; H319: >= 0,06 - < 0,6 Skin Sens. 1A; H317: >= 0,0015 - 100 Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100	

## 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. Rinse mouth immediately and drink plenty of water. Get medical

# Safety Data Sheet

according to UK REACH Regulation

## MIXOL® Nr. 12 Tannengrün

Revision date: 03.07.2025

Product code: PES87

Page 3 of 12

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 (CO<sub>2</sub>), 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 (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride (HCl).

### **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**

#### **General advice**

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

#### **For non-emergency personnel**

Provide adequate ventilation. Use personal protection equipment.

#### **For emergency responders**

Wear personal protection equipment (refer to section 8).

### **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**

#### **For containment**

Stop leak if safe to do so. Cover drains.

#### **For cleaning up**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### **Other information**

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**

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 4 of 12

**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.

**Advice on general occupational hygiene**

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.

**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 <sup>3</sup>	fibres/ml	Category	Origin
1317-65-3	Calcium carbonate, inhalable dust	-	10		TWA (8 h)	WEL
1317-65-3	Calcium carbonate, respirable	-	4		TWA (8 h)	WEL
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
-	Iron salts (as Fe)	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

# Safety Data Sheet

according to UK REACH Regulation

## MIXOL® Nr. 12 Tannengrün

Revision date: 03.07.2025

Product code: PES87

Page 5 of 12

### 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 <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0,966 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	1,2 mg/m <sup>3</sup>
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 <sup>3</sup>
Worker DNEL, acute		inhalation	local	0,04 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	0,02 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	0,04 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	0,09 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,11 mg/kg bw/day

### PNEC values

CAS No	Substance	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
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
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.

#### Individual protection measures, such as personal protective equipment

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 6 of 12

**Eye/face protection**

Wear eye protection/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.

**Thermal hazards**

No information available.

**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	
Odour threshold:	not applicable	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		100 °C
Flammability:		Non-flammable.
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		> 100 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		> 100 °C
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility:		miscible
Solubility in other solvents		not determined
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		1,46 g/cm <sup>3</sup>
Relative vapour density:		not determined
Particle characteristics:		not applicable

**9.2. Other information**

No information available.

**SECTION 10: Stability and reactivity**

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 7 of 12

**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 (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>).**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

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

**ATEmix calculated**

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

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	ATE 450 mg/kg			
	dermal	LD50 > 2000 mg/kg	Rat	Manufacturer	OECD 402
	inhalation dust/mist	ATE 0,21 mg/l			
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	OECD 403

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: 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**

# Safety Data Sheet

according to UK REACH Regulation

## MIXOL® Nr. 12 Tannengrün

Revision date: 03.07.2025

Product code: PES87

Page 8 of 12

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

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

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

Reproductive toxicity: 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.

### Information on likely routes of exposure

Skin contact, Eye contact, oral, Inhalation.

## 11.2. Information on other hazards

### Endocrine disrupting properties

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

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	0,110	72 h	Selenastrum capricornutum	Manufacturer OECD 201
	Acute crustacea toxicity	EC50 mg/l	0,643	48 h	Daphnia magna (Big water flea)	Manufacturer OECD 202
	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 algae toxicity	ErC50 mg/l	0,0052	72 h	Skeletonema costatum	Manufacturer OECD 201
	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.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2634-33-5	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one			
	OECD 301C	85 %	63	Manufacturer
	Moderately/partially biodegradable.			

### 12.3. Bioaccumulative potential

The product has not been tested.

# Safety Data Sheet

according to UK REACH Regulation

## MIXOL® Nr. 12 Tannengrün

Revision date: 03.07.2025

Product code: PES87

Page 9 of 12

### 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.

### 12.5. Results of PBT and vPvB assessment

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

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. 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)

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

### Inland waterways transport (ADN)

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

### Marine transport (IMDG)

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

### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
--------------------------------------	--

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 10 of 12

**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. Maritime transport in bulk according to IMO instruments**

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

Directive 2004/42/EC on VOC in  
paints and varnishes: < 0,1 %Information according to Directive  
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

**Additional information**

Observe in addition any national regulations!

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information**

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 11 of 12

**Abbreviations and acronyms**

Acute Tox: Acute toxicity  
 Skin Corr: Skin corrosion  
 Skin Irrit: Skin irritation  
 Eye Dam: Eye damage  
 Skin Sens: Skin sensitisation  
 Aquatic Acute: Acute aquatic hazard  
 Aquatic Chronic: Chronic aquatic hazard  
 CAS: Chemical Abstracts Service  
 CLP: Classification, Labelling and Packaging  
 EU: European Union  
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
 REACH: Registration, Evaluation and Authorization of Chemicals  
 UN: United Nations  
 PBT: Persistent, Bioaccumulative, Toxic  
 SVHC: Substance of Very High Concern  
 vPvB: very Persistent, very Bioaccumulative  
 ATE: Acute Toxicity Estimates  
 BCF: Bio-Concentration Factor  
 DMEL: Derived Minimal Effect Level  
 DNEL: Derived No Effect Level  
 PNEC: Predicted No Effect Concentration  
 VOC: Volatile Organic Compounds  
 DIN: Deutsches Institut für Normung e.V. (German Institute for Standardization)  
 EN: European Standard  
 ISO: International Organization for Standardization  
 IUCLID: International Uniform Chemical Information Database  
 LC50: Lethal Concentration, 50 %  
 LD50: Lethal Dose, 50 %  
 LL50: Lethal Loading, 50 %  
 OECD: Organisation for Economic Co-operation and Development  
 EC50: Effective Concentration 50 %  
 EL50: Effect Loading, 50 %  
 ErC50: Effective Concentration 50 %, growth rate  
 M-Faktor: Multiplication Factor  
 NOEC: No Observed Effect Concentration  
 ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)  
 ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 DGR: Dangerous Goods Regulations  
 EmS: Emergency Schedules  
 IATA: International Air Transport Association  
 IBC: Intermediate Bulk Container  
 ICAO: International Civil Aviation Organization  
 IE: Industrial Emissions  
 IMDG: International Maritime Code for Dangerous Goods  
 LQ: Limited Quantity  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 MFAG: Medical First Aid Guide  
 RID: Regulations concerning the International carriage of Dangerous goods by rail  
 TI: Technical Instructions

**Key literature references and sources for data**

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety

**Safety Data Sheet**

according to UK REACH Regulation

**MIXOL® Nr. 12 Tannengrün**

Revision date: 03.07.2025

Product code: PES87

Page 12 of 12

assessment, chapter R.20 (Table of terms and abbreviations). (v.1.2, 2013)

**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.
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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*