Safety Data Sheet

According to Regulation (EC) No 1907/2006

Carefree Satin & Care

Revision: 2024-08-07 **Version:** 01.0

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

1.1 Product identifier

Trade name: Carefree Satin & Care

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

Product use:	Floor polish/impregnating agent. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_4_1
AISE_SWED_PW_13_2
AISE_SWED_PW_19_1

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssenbroeksedijk 2, 3542DN Utrecht], The Netherlands

Contact details
Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom
Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@solenis.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)
For medical or environmental emergency only:
call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Chronic aquatic toxicity, Category 3 (H412)

2.2 Label elements

Contains 1,2-benzisothiazol-3(2H)-one (Benzisothiazolinone), 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1) (Methylchloroisothiazolinone, Methylisothiazolinone), 2-methyl-2H-isothiazol-3-one (Methylisothiazolinone), Rosin, fumarated, polymer with glycerol, ammonium salt, tetraamminezinc(2+) carbonate

Hazard statements:
H412 - Harmful to aquatic life with long lasting effects.
EUH208 - May produce an allergic reaction.

Further indications on the label:
Contains: preservative.

2.3 Other hazards

No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
Rosin, fumarated, polymer with glycerol, ammonium salt	[4]	68554-18-7	[4]	Eye irritation, Category 2 (H319) Skin sensitisation, Sub-category 1B (H317) Chronic aquatic toxicity, Category 4 (H413)		0.1-1
tetraamminezinc(2+) carbonate	254-099-2	38714-47-5	-	Skin irritation, Category 2 (H315) Eye irritation, Category 2 (H319) Skin sensitisation, Category 1 (H317)		0.1-1

				Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		
1,2-benzisothiazol-3(2H)-one	220-120-9	2634-33-5	[6]	Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 4 (H302) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.01-0.1
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	220-239-6 247-500-7	55965-84-9	[6]	Acute toxicity - Dermal, Category 2 (H310) Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 3 (H301) Skin corrosion, Category 1C (H314) EUH071 Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=100 (H400) Chronic aquatic toxicity, Category 1 M=100 (H410)		< 0.01
2-methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	[6]	Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 3 (H301) Acute toxicity - Dermal, Category 3 (H311) Skin corrosion, Category 1B (H314) Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=10 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		< 0.01

Specific concentration limits
ammonia:
• Specific target organ toxicity - Single exposure, Category 3 (H335) >= 5%
1,2-benzisothiazol-3(2H)-one:
• Skin sensitisation, Category 1 (H317) >= 0.036%
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1):
• Skin sensitisation, Category 1 (H317) >= 0.0015%
• Serious eye damage, Category 1 (H318) >= 0.6% > Eye irritation, Category 2 (H319) >= 0.06%
• Skin corrosion, Category 1C (H314) >= 0.6% > Skin irritation, Category 2 (H315) >= 0.06%
2-methyl-2H-isothiazol-3-one:
• Skin sensitisation, Category 1 (H317) >= 0.0015%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.
[6] Exempted: biocidal active. See Article 15(2) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.

Eye contact: Rinse cautiously with water for several minutes. If irritation occurs and persists, get medical attention.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: No known effects or symptoms in normal use.

Eye contact: No known effects or symptoms in normal use.

Ingestion: No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
No special hazards known.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
No special measures required.

6.2 Environmental precautions
Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up
Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
No special precautions required.
Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.
Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash hands before breaks and at the end of workday. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values
Human exposure
DNEL/DMEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	0.027

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-

5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	0.0026	0.00026	-	0.055
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available	No data available	No data available	No data available
tetraamminezinc(2+) carbonate	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	0.0132	-	0.33	-
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Users are advised to consider national Occupational Exposure Limits or other equivalent values, if available.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC

Manual application by dipping, soaking, pouring	AISE_SWED_PW_13_2	PW	PROC 13	60	ERC8a
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

Personal protective equipment

Eye / face protection: Safety glasses are not normally required. However, their use is recommended in those cases where splashes may occur when handling the product (EN 16321 / EN 166).

Hand protection: Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection: No special requirements under normal use conditions.

Respiratory protection: No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Liquid

Colour: Milky , Light , from White to Yellow

Odour: Ammonia

Odour threshold: Not applicable

Melting point/freezing point (°C): Not determined — Not relevant to classification of this product

Initial boiling point and boiling range (°C): Not determined — See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available		
tetraamminezinc(2+) carbonate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		
2-methyl-2H-isothiazol-3-one	No data available		

Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Not flammable.

Flash point (°C): Not determined

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Lower and upper explosion limit/flammability limit (%): Not determined — See substance data

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

pH: ≈ 9 (neat) — ISO 4316

Kinematic viscosity: Not determined

Solubility in / Miscibility with water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available		
tetraamminezinc(2+) carbonate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available		
2-methyl-2H-isothiazol-3-one	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark

Vapour pressure: Not determined — See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available		

tetraamminezinc(2+) carbonate	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	2.2	Weight of Evidence	25
2-methyl-2H-isothiazol-3-one	No data available		

Method / remark

Relative density: ≈ 1.02 (20 °C) — OECD 109 (EU A.3)
Relative vapour density: No data available. — Not relevant to classification of this product
Particle characteristics: No data available. — Not applicable to liquids.

9.2 Other information
9.2.1 Information with regard to physical hazard classes
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.
Corrosion to metals: Not corrosive

9.2.2 Other safety characteristics
No other relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
None known under normal use conditions.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

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

Mixture data: .

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below:.

Acute toxicity
Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Oral (mg/kg)
Rosin, fumarated, polymer with glycerol, ammonium salt	LD_{50}	> 2000				Not established
tetraamminezinc(2+) carbonate		No data available				Not established
1,2-benzisothiazol-3(2H)-one	LD_{50}	> 2000	Rat			450
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD_{50}	64	Rat	Method not given		64
2-methyl-2H-isothiazol-3-one	LD_{50}	120	Rat	OECD 401 (EU B.1)		120

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data				Not established

		available				
tetraamminezinc(2+) carbonate		No data available				Not established
1,2-benzisothiazol-3(2H)-one	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)		Not established
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LD_{50}	87.12	Rabbit	Method not given		87.12
2-methyl-2H-isothiazol-3-one	LD_{50}	242	Rat	OECD 402 (EU B.3)	24 hours	242

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC_{50}	0.33	Rat		
2-methyl-2H-isothiazol-3-one	LC_{50}	(mist) 0.11	Rat	OECD 403 (EU B.2)	4 hours

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
Rosin, fumarated, polymer with glycerol, ammonium salt	Not established	Not established	Not established	Not established
tetraamminezinc(2+) carbonate	Not established	Not established	Not established	Not established
1,2-benzisothiazol-3(2H)-one	Not established	0.21	Not established	Not established
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Not established	0.33	Not established	Not established
2-methyl-2H-isothiazol-3-one	Not established	0.11	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	Corrosive		Method not given	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Corrosive		Method not given	
2-methyl-2H-isothiazol-3-one	Corrosive			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Rosin, fumarated, polymer with glycerol, ammonium salt	Irritant			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	Severe damage		Method not given	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Severe damage		Method not given	
2-methyl-2H-isothiazol-3-one	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			
2-methyl-2H-isothiazol-3-one	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Rosin, fumarated, polymer with glycerol, ammonium salt	Sensitising			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	Sensitising	Guinea pig		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	Sensitising	Guinea pig	Method not given OECD 406 (EU B.6) / GPMT	
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			
2-methyl-2H-isothiazol-3-one	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available		No data available	
tetraamminezinc(2+) carbonate	No data available		No data available	
1,2-benzisothiazol-3(2H)-one	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for mutagenicity	Method not given	No data available	
2-methyl-2H-isothiazol-3-one	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13)	No data available	

Carcinogenicity

Ingredient(s)	Effect
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available
tetraamminezinc(2+) carbonate	No data available
1,2-benzisothiazol-3(2H)-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No evidence for carcinogenicity, negative test results
2-methyl-2H-isothiazol-3-one	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
Rosin, fumarated, polymer with glycerol, ammonium salt			No data available				
tetraamminezinc(2+) carbonate			No data available				
1,2-benzisothiazol-3(2H)-one			No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)			No data available				No evidence for reproductive toxicity No evidence for teratogenic effects
2-methyl-2H-isothiazol-3-one			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data				

		available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
Rosin, fumarated, polymer with glycerol, ammonium salt			No data available					
tetraamminezinc(2+) carbonate			No data available					
1,2-benzisothiazol-3(2H)-one			No data available					
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)			No data available					
2-methyl-2H-isothiazol-3-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available
tetraamminezinc(2+) carbonate	No data available
1,2-benzisothiazol-3(2H)-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available
2-methyl-2H-isothiazol-3-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available
tetraamminezinc(2+) carbonate	No data available
1,2-benzisothiazol-3(2H)-one	No data available
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available
2-methyl-2H-isothiazol-3-one	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information
No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture .

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate	LC_{50}	< 1	*Oncorhynchus mykiss*	Read across	
1,2-benzisothiazol-3(2H)-one	LC_{50}	2.18	*Oncorhynchus mykiss*	OECD 203 (EU C.1)	
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	LC_{50}	0.28	*Lepomis macrochirus*	OECD 203 (EU C.1)	96
2-methyl-2H-isothiazol-3-one	LC_{50}	4.77	*Oncorhynchus mykiss*	Similar to OECD 203	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate	EC_{50}	1.2	*Ceriodaphnia dubia*	Read across	
1,2-benzisothiazol-3(2H)-one	EC_{50}	2.94	*Daphnia*	OECD 202 (EU C.2)	48
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{50}	0.126	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
2-methyl-2H-isothiazol-3-one	LC_{50}	0.93-1.9	*Daphnia magna Straus*	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate	EC_{50}	0.403	*Pseudokirchneriella subcapitata*	Read across	
1,2-benzisothiazol-3(2H)-one	E_rC_{50}	0.11		OECD 201 (EU C.3)	72
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{50}	0.003	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72
2-methyl-2H-isothiazol-3-one	EC_{50}	0.158	*Selenastrum capricornutum*	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available			
2-methyl-2H-isothiazol-3-one		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available			
tetraamminezinc(2+) carbonate		No data available			
1,2-benzisothiazol-3(2H)-one	EC_{20}	3.3	*Activated sludge*	OECD 209	3 hour(s)
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	EC_{20}	0.97	*Activated sludge*	OECD 209	3 hour(s)
2-methyl-2H-isothiazol-3-one	EC_{20}	2.8	*Activated sludge*	OECD 209	3 hour(s)

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
Rosin, fumarated, polymer with glycerol, ammonium salt		No data available				
tetraamminezinc(2+) carbonate		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No		No data				

247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		available				

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available				

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Type	Half-life time	Method	Evaluation	Remark
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		No data available			

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
Rosin, fumarated, polymer with glycerol, ammonium salt					No data available
tetraamminezinc(2+) carbonate					Not applicable (inorganic substance)
1,2-benzisothiazol-3(2H)-one	Adapted activated sludge	CO_2 production	62% in 4 day(s)	OECD 301C	Not readily biodegradable.
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
2-methyl-2H-isothiazol-3-one				Other	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT_{50}	Method	Evaluation
1,2-benzisothiazol-3(2H)-one	Sewage treatment plant simulation	Primary degradation	> 90%	OECD 303A	Biodegradable
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)					No data available
2-methyl-2H-isothiazol-3-one	Surface water (fresh)	Mineralisation rate	> 50 % in 4 day(s)	OECD 309	Biodegradable

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available			
tetraamminezinc(2+) carbonate	No data available			
1,2-benzisothiazol-3(2H)-one	0.7	OECD 107	No bioaccumulation expected	
5-chloro-2-methyl-2H-isothiazol-3-one	-0.71 - +0.75	Method not given	No bioaccumulation expected	

[EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)				
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available				
tetraamminezinc(2+) carbonate	No data available				
1,2-benzisothiazol-3(2H)-one	6.95		OECD 305		
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available				
2-methyl-2H-isothiazol-3-one	3.16		OECD 305		

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
Rosin, fumarated, polymer with glycerol, ammonium salt	No data available				
tetraamminezinc(2+) carbonate	No data available				
1,2-benzisothiazol-3(2H)-one	No data available				
5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1)	No data available				
2-methyl-2H-isothiazol-3-one	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue: 16 03 05* - organic wastes containing dangerous substances.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

SECTION 15: Regulatory information

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

National regulations :
• Regulation (EC) 1907/2006 - REACH (UK amended)
• Regulation (EC) 1272/2008 - CLP (UK amended)
• Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
• Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
• International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Comah - classification: Not classified

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

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Classification procedure
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• ATE - Acute Toxicity Estimate
• DNEL - Derived No Effect Limit
• EC50 - effective concentration, 50%
• ERC - Environmental release categories
• EUH - CLP Specific hazard statement
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• LCS - Life cycle stage
• LD50 - Lethal Dose, 50% / Median Lethal dose
• NOAEL - No observed adverse effect level
• NOEL - No observed effect level
• OECD - Organisation for Economic Cooperation and Development
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• 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.
• H319 - Causes serious eye irritation.
• H330 - Fatal if inhaled.
• H400 - Very toxic to aquatic life.
• H402 - Harmful to aquatic life.
• H410 - Very toxic to aquatic life with long lasting effects.
• H413 - May cause long lasting harmful effects to aquatic life.
• EUH071 - Corrosive to the respiratory tract.

End of Safety Data Sheet