Safety Data Sheet

According to Regulation (EC) No 1907/2006

Comfort Professional Lily and Rice Flower

Revision: 2019-08-03 **Version:** 11.1

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

1.1 Product identifier
Trade name: Comfort Professional Lily and Rice Flower
Comfort is a registered trade mark and is used under licence of Unilever

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses:
AISE-P105 - Conditioner (softener/starch). Semi-automatic process
AISE-P106 - Conditioner (softener/starch). Manual process
AISE-C3 - Fabric conditioners (liquid regular, liquid concentrate) for consumer use
Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, 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@diversey.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
Not classified as hazardous

2.2 Label elements
Contains 1,2-benzisothiazol-3(2H)-one (Benzisothiazolinone)

Hazard statements:
EUH208 - May produce an allergic reaction.

Precautionary statements:
P102 - Keep out of reach of children.

Further indications on the label:
Contains: preservative.

2.3 Other hazards
No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	295-344-3	91995-81-2	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)		1-3
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	229-222-8	6440-58-0	01-2119976015-37	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)		0.1-1
1,2-benzisothiazol-3(2H)-one	220-120-9	2634-33-5	[6]	Acute Tox. 2 (H330) Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Aquatic Acute 1 (H400)		0.01-0.1

2-methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	-	Acute Tox. 2 (H330) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		0.01-0.1

Workplace exposure limit(s), if available, are listed in subsection 8.1.
[11] Substance of Very High Concern (SVHC)
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

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

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, sawdust). 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:

Follow general hygiene considerations recognised as common good workplace practices. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products unless adviced by Diversey. Wash hands thoroughly after handling. 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. Keep out of reach of children.
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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL 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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL 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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
2-methyl-2H-isothiazol-3-one	-	-	-	-

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with	No data available	No data available	No data available	No data available

triethanolamine, di-Me sulfate-quaternized				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available	No data available	No data available	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available	No data available	No data available	No data available
1,2-benzisothiazol-3(2H)-one	-	-	-	-
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:
Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

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 166).
Hand protection: No special requirements under normal use conditions.
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.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 1

Appropriate engineering controls: No special requirements under normal use conditions.
Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment
Eye / face protection: No special requirements under normal use conditions.
Hand protection: No special requirements under normal use conditions.
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: Opaque, Light, Pink	
Odour: Slightly perfumed	
Odour threshold: Not applicable	
pH ≈ 3 (neat)	ISO 4316
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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		
2-methyl-2H-isothiazol-3-one	No data available		

Method / remark

Flammability (liquid): Not flammable.
Flash point (°C): not determined
Sustained combustion: Not applicable.
(UN Manual of Tests and Criteria, section 32, L.2)
Evaporation rate: Not determined — Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids
Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Method / remark

Vapour pressure: Not determined — See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available		
1,2-benzisothiazol-3(2H)-one	No data available		
2-methyl-2H-isothiazol-3-one	No data available		

Method / remark

Vapour density: Not determined — Not relevant to classification of this product
Relative density: ≈ 1.00 (20 °C) — OECD 109 (EU A.3)
Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available		
1,2-benzisothiazol-3(2H)-one	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

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
Viscosity: ≈ 25 mPa.s (20 °C) — DM-006 Viscosity - Additional
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

9.2 Other information
Surface tension (N/m): Not determined — Not relevant to classification of this product
Corrosion to metals: Not corrosive — Weight of evidence

Substance data, dissociation constant, if 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
Reacts with alkali.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

No data is available on the mixture.

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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	LD_{50}	> 5000	Rat	Method not given	
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	LD_{50}	2890	Rat	OECD 401 (EU B.1) Substance was tested as 55 % aqueous solution	RM SDS
1,2-benzisothiazol-3(2H)-one	LD_{50}	> 2000	Rat		
2-methyl-2H-isothiazol-3-one	LD_{50}	> 50-300	Rat	OECD 401 (EU B.1)	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	LD_{50}	> 2000	Rabbit	Non guideline test	
1,2-benzisothiazol-3(2H)-one	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)	
2-methyl-2H-isothiazol-3-one	LD_{50}	> 200-1000	Rat	OECD 402 (EU B.3)	24 hours

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available			
1,2-benzisothiazol-3(2H)-one		No data available			
2-methyl-2H-isothiazol-3-one	LC_{50}	(mist) 0.11	Rat	OECD 403 (EU B.2)	4 hours

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	Mild irritant		Method not given	
1,2-benzisothiazol-3(2H)-one	Corrosive		Method not given	
2-methyl-2H-isothiazol-3-one	Corrosive			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	Not corrosive or irritant	Rabbit		
1,2-benzisothiazol-3(2H)-one	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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available			
1,2-benzisothiazol-3(2H)-one	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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	Not sensitising	Guinea pig	Method not given	

1,2-benzisothiazol-3(2H)-one	Sensitising	Guinea pig		
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available			
1,2-benzisothiazol-3(2H)-one	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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available		No data available	
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	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	
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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available
1,2-benzisothiazol-3(2H)-one	No data available
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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized			No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione			No data available				
1,2-benzisothiazol-3(2H)-one			No data available				
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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				

1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized			No data available					
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione			No data available					
1,2-benzisothiazol-3(2H)-one			No data available					
2-methyl-2H-isothiazol-3-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available
1,2-benzisothiazol-3(2H)-one	No data available
2-methyl-2H-isothiazol-3-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available
1,2-benzisothiazol-3(2H)-one	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. If relevant, see section 9 for dynamic viscosity and relative density of the product.

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

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)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	LC_{50}	> 82.3	*Brachydanio rerio*	OECD 203 (EU C.1)	96
1,2-benzisothiazol-3(2H)-one	LC_{50}	2.18	*Oncorhynchus mykiss*	OECD 203 (EU C.1)	
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	EC_{50}	29.1	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
1,2-benzisothiazol-3(2H)-one	EC_{50}	2.94	*Daphnia*	OECD 202 (EU C.2)	48
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	$E_r C_{50}$	12	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
1,2-benzisothiazol-3(2H)-one	$E_r C_{50}$	0.11		OECD 201 (EU C.3)	72
2-methyl-2H-isothiazol-3-one		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available			
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	EC_{50}	> 100	*Activated sludge*	OECD 209	
1,2-benzisothiazol-3(2H)-one	EC_{20}	3.3	*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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized		No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione		No data available				
1,2-benzisothiazol-3(2H)-one		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Terrestrial toxicity

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

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized					No data available
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione				OECD 301A	Readily biodegradable
1,2-benzisothiazol-3(2H)-one				Weight of evidence	Not readily biodegradable.
2-methyl-2H-isothiazol-3-one					Not readily biodegradable.

Ready biodegradability - anaerobic and marine conditions, if 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
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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available			
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available			
1,2-benzisothiazol-3(2H)-one	0.7	OECD 107	No bioaccumulation expected	
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	< -1.79		OECD 305	No bioaccumulation expected	
1,2-benzisothiazol-3(2H)-one	6.95		OECD 305		
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
fatty acids, C10-20 and C16-18-unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	No data available				
1,3-bis(hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione	No data available				
1,2-benzisothiazol-3(2H)-one	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 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: 20 01 30 - detergents other than those mentioned in 20 01 29.

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: 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 Transport in bulk according to Annex II of MARPOL and the IBC Code: Non-dangerous goods

SECTION 15: Regulatory information

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

EU regulations:
- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation

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

UFI: WPK5-P0W4-7002-V0A9

Ingredients according to EC Detergents Regulation 648/2004

cationic surfactants < 5 %

perfumes, DMDM Hydantoin, Benzisothiazolinone, Methylisothiazolinone

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

SDS code: MSDS5703 **Version:** 11.1 **Revision:** 2019-08-03

Reason for revision:

This data sheet contains changes from the previous version in section(s):, 3, 6, 8, 9, 11, 12, 16

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.

Full text of the H and EUH phrases mentioned in section 3:
- H301 - Toxic if swallowed.
- H302 - Harmful if swallowed.
- 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.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.

• H411 - Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• DNEL - Derived No Effect Limit
• EUH - CLP Specific hazard statement
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• ATE - Acute Toxicity Estimate
• LD50 - Lethal Dose, 50% / Median Lethal dose
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• EC50 - effective concentration, 50%
• NOEL - No observed effect level
• NOAEL - No observed adverse effect level
• OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet