

Persil Bio Small & Mighty Professional

Revision: 2024-09-13

Version: 01.1

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

1.1 Product identifier

Trade name: Persil Bio Small & Mighty Professional

Persil is a registered trade mark and is used under licence of Unilever

UFI: 8X2K-2168-400Q-W0FF

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

Product use: Laundry detergent.

Uses advised against: Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :

AISE_SWED_PW_8a_1
PC35-Washing and cleaning products
AISE_SWED_PW_1_1
AISE_SWED_PW_4_1
PC35-Washing and cleaning products

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, De Corridor 4, 3621ZB Breukelen [Maarssebroeksedijk 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

Skin irritation, Category 2 (H315)
Eye irritation, Category 2 (H319)
Skin sensitisation, Category 1 (H317)
Chronic aquatic toxicity, Category 3 (H412)

2.2 Label elements



Signal word: Warning.

Contains 2-methyl-2H-isothiazol-3-one (Methylisothiazolinone), 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one (Tetramethyl Acetyloctahydronaphtalenes), alpha-hexylcinnamaldehyde (Hexyl cinnamal), 3(2H)-Isothiazolone, 2-octyl- (Octylisothiazolinone), isoeugenol (Isoeugenol)

Hazard statements:

H315 + H319 - Causes skin and serious eye irritation.

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements:

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

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P280 - Wear protective gloves.

P501 - Dispose of unused content as chemical waste.

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
Triethanolamine dodecylbenzenesulfonate	248-406-9	27323-41-7	-	Acute toxicity - Oral, Category 3 (H301) Skin irritation, Category 2 (H315) Eye irritation, Category 2 (H319)		20-30
Alcohols, C12-14, ethoxylated	500-213-3	68439-50-9	-	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		3-10
alcohols, C12-14, ethoxylated, sulphates, sodium salts	500-234-8	68891-38-3	01-211948863 9-16	Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		3-10
tetrasodium (1-hydroxy ethylidene)bisphosphonate	223-267-7	3794-83-0	01-2119510382-5 2	Acute toxicity - Oral, Category 4 (H302) Eye irritation, Category 2 (H319)		1-3
alpha-hexylcinnamaldehyde	202-983-3	101-86-0	01-211953309 2-50	Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 2 (H411)		0.1-1
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	259-174-3	54464-57-2	01-211948998 9-04	Skin sensitisation, Category 2 (H315) Skin sensitisation, Sub-category 1B (H317) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
(E)-2-Benzylideneoctanal	639-566-4	165184-98-5	01-211953309 2-50	Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 2 (H411)		0.1-1
d-limonene	227-813-5	5989-27-5	01-211952922 3-47	Flammable liquids, Category 3 (H226) Aspiration toxicity, Category 1 (H304) Skin irritation, Category 2 (H315) Skin sensitisation, Sub-category 1B (H317) Acute aquatic toxicity, Category 1 M=1 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		0.1-1
coumarin	202-086-7	91-64-5	01-211994930 0-45,01-21199 43756-26	Acute toxicity - Oral, Category 4 (H302) Skin sensitisation, Sub-category 1B (H317)		0.1-1
citronellol	203-375-0	106-22-9	01-211945399 5-23	Skin irritation, Category 2 (H315) Eye irritation, Category 2 (H319) Skin sensitisation, Sub-category 1B (H317)		0.1-1
3(2H)-Isothiazolone, 2-octyl-	247-761-7	26530-20-1	-	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=100 (H400) Chronic aquatic toxicity, Category 1 M=100 (H410)		0.01-0.1
isoeugenol	202-590-7	97-54-1	01-212022368 2-61	Skin sensitisation, Sub-category 1A (H317)		< 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) EUH071 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

3(2H)-Isothiazolone, 2-octyl-:

- Skin sensitisation, Category 1 (H317) >= 0.0015%

2-methyl-2H-isothiazol-3-one:

- Skin sensitisation, Category 1 (H317) >= 0.0015%

isoeugenol:

- Skin sensitisation, Category 1 (H317) >= 0.01%

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Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

[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

General Information:

Symptoms of intoxication may even occur after several hours. It is recommended to continue medical observation for at least 48 hours after the incident. If medical advice is needed, have product container or label at hand.

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:

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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:

Causes irritation. May cause an allergic skin reaction.

Eye contact:

Causes severe irritation.

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

Repeated or prolonged contact: Wear suitable gloves.

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.

Advice 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 advised by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

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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/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
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	15
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	2.4
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	-	-	-	-
d-limonene	-	-	-	4.76
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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)
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	2750
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	48
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	0.525 mg/cm ² skin	-	0.525 mg/cm ² skin	18.2
d-limonene	0.222 mg/cm ² skin	-	No data available	-
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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)
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	1650
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available	-	No data available	24
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available

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(E)-2-Benzylideneoctanal	0.787 mg/cm ² skin	-	0.787 mg/cm ² skin	9.11
d-limonene	0.111 mg/cm ² skin	-	No data available	-
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	175
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	16.9
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	6.28	-	-	0.078
d-limonene	-	-	-	33.3
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	52
tetrasodium (1-hydroxy ethylidene)bisphosphonate	10	-	10	4.2
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	4.71	-	-	0.019
d-limonene	-	-	-	8.33
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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)
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	0.24	0.024	0.071	10000
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	-
alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	0.001	0	0.002	10
d-limonene	0.014	0.0014	-	1.8
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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/m ³)
Triethanolamine dodecylbenzenesulfonate	No data available	No data available	No data available	No data available
Alcohols, C12-14, ethoxylated	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	5.45	0.545	0.946	-
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-	-	-

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alpha-hexylcinnamaldehyde	No data available	No data available	No data available	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)etha n-1-one	No data available	No data available	No data available	No data available
(E)-2-Benzylideneoctanal	3.2	0.064	0.398	-
d-limonene	3.85	0.385	0.763	-
coumarin	No data available	No data available	No data available	No data available
citronellol	No data available	No data available	No data available	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available
isoeugenol	No data available	No data available	No data available	No data available
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: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.
Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
PC35-Washing and cleaning products	PC35-Washing and cleaning products	C		-	ERC8a
Manual transfer and dilution	AISE_SWED_PW_8a_1	PW	PROC 8a	60	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: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

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 (% w/w): 0.135

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

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

REACH use scenarios considered for the diluted product:

	SWED	LCS	PROC	Duration (min)	ERC
PC35-Washing and cleaning products	PC35-Washing and cleaning products	C	-	-	ERC8a
Automatic application in a dedicated closed system	AISE_SWED_PW_1_1	PW	PROC 1	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

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.

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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 , Purple	
Odour: Product specific	
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)
Triethanolamine dodecylbenzenesulfonate	No data available		
Alcohols, C12-14, ethoxylated	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	> 100	Method not given	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Product decomposes before boiling		
alpha-hexylcinnamaldehyde	No data available		
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
(E)-2-Benzylideneoctanal	310.8	OECD 103 (EU A.2)	1013.25
d-limonene	175-178	Weight of evidence	1013
coumarin	No data available		
citronellol	No data available		
3(2H)-Isothiazolone, 2-octyl-	No data available		
isoeugenol	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:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
tetrasodium (1-hydroxy ethylidene)bisphosphonate	-	-
d-limonene	0.7	6.1

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: Not applicable	ISO 4316
Dilution pH: ≈ 8 (0.14 %)	ISO 4316
Kinematic viscosity: Not determined	DM-006 Viscosity - Standard
Solubility in / Miscibility with water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
Triethanolamine dodecylbenzenesulfonate	No data available		
Alcohols, C12-14, ethoxylated	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	280 Soluble	Method not given	20
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Soluble		
alpha-hexylcinnamaldehyde	No data available		
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
(E)-2-Benzylideneoctanal	0.00162	OECD 105 (EU A.6)	20
d-limonene	Insoluble	Method not given	20
coumarin	No data available		
citronellol	No data available		
3(2H)-Isothiazolone, 2-octyl-	No data available		
isoeugenol	No data available		

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2-methyl-2H-isothiazol-3-one	No data available		
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Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Vapour pressure: Not determined

Method / remark
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
Triethanolamine dodecylbenzenesulfonate	No data available		
Alcohols, C12-14, ethoxylated	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available		
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Negligible		
alpha-hexylcinnamaldehyde	No data available		
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		
(E)-2-Benzylideneoctanal	0.068	OECD 104 (EU A.4)	25
d-limonene	190-230	Method not given	20
coumarin	No data available		
citronellol	No data available		
3(2H)-Isothiazolone, 2-octyl-	No data available		
isoeugenol	No data available		
2-methyl-2H-isothiazol-3-one	No data available		

Relative density: $\approx$ 1.03 (20 °C)

Relative vapour density: No data available.

Particle characteristics: No data available.

Method / remark
OECD 109 (EU A.3)
Not relevant to classification of this product
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

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Eye irritation and corrosivity

Result: Eye irritant 2

Species: Not applicable.

Method: Weight of evidence

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)
Triethanolamine dodecylbenzenesulfonate		No data available	Rabbit			4199
Alcohols, C12-14, ethoxylated	LD ₅₀	1376	Rat	OECD 401 (EU B.1)		Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD ₅₀	> 2000	Rat	OECD 401 (EU B.1)		Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	LD ₅₀	940	Rat	OECD 401 (EU B.1)		940
alpha-hexylcinnamaldehyde		3100				Not established
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				Not established
(E)-2-Benzylideneoctanal	LD ₅₀	3100	Rat	OECD 401 (EU B.1)		Not established
d-limonene	LD ₅₀	4400 - 5100	Rat	Method not given		Not established
coumarin		No data available				Not established
citronellol		No data available				Not established
3(2H)-Isothiazolone, 2-octyl-		No data available				125
isoeugenol		No data available				Not established
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)
Triethanolamine dodecylbenzenesulfonate		No data available				Not established
Alcohols, C12-14, ethoxylated	LD ₅₀	> 3000	Rabbit			Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD ₅₀	> 2000	Rat	OECD 402 (EU B.3)		Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				Not established
alpha-hexylcinnamaldehyde		No data available				Not established
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				Not established
(E)-2-Benzylideneoctanal	LD ₅₀	> 3000	Rabbit	OECD 402 (EU B.3)		Not established
d-limonene	LD ₅₀	> 5000	Rabbit	Method not given		Not established
coumarin		No data available				Not established
citronellol		No data available				Not established
3(2H)-Isothiazolone, 2-octyl-		No data available				311
isoeugenol		No data available				Not established
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)
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated	LC ₅₀	> 1600	Rat	OECD 403 (EU B.2)	4
alcohols, C12-14, ethoxylated, sulphates, sodium salts		5.71			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
(E)-2-Benzylideneoctanal	LC ₅₀	> 2.12 (mist)	Rat	OECD 403 (EU B.2)	4
d-limonene		No data available			
coumarin		No data available			
citronellol		No data available			
3(2H)-Isothiazolone, 2-octyl-		No data			

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		available			
isoeugenol		No data available			
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)
Triethanolamine dodecylbenzenesulfonate	Not established	Not established	Not established	Not established
Alcohols, C12-14, ethoxylated	Not established	Not established	Not established	Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Not established	Not established	Not established	Not established
tetrasodium (1-hydroxy ethylidene)bisphosphonate	Not established	Not established	Not established	Not established
alpha-hexylcinnamaldehyde	Not established	Not established	Not established	Not established
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	Not established	Not established	Not established	Not established
(E)-2-Benzylideneoctanal	Not established	Not established	Not established	Not established
d-limonene	Not established	Not established	Not established	Not established
coumarin	Not established	Not established	Not established	Not established
citronellol	Not established	Not established	Not established	Not established
3(2H)-Isothiazolone, 2-octyl-	Not established	Not established	Not established	Not established
isoeugenol	Not established	Not established	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
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	Not irritant	Rabbit	OECD 404 (EU B.4)	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	Irritant	Rabbit	OECD 404 (EU B.4)	4 hour(s)
d-limonene	Irritant	Rabbit	Method not given	
coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	No data available			
2-methyl-2H-isothiazol-3-one	Corrosive			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	Severe damage	Rabbit	OECD 405 (EU B.5)	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
d-limonene	No data available			
coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	No data available			
2-methyl-2H-isothiazol-3-one	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	No data available			
d-limonene	No data available			

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coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	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)
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	Sensitising	Mouse	OECD 429 (EU B.42)	
d-limonene	Sensitising	Guinea pig	Method not given	
coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	No data available			
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	No data available			
d-limonene	No data available			
coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	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)
Triethanolamine dodecylbenzenesulfonate	No data available		No data available	
Alcohols, C12-14, ethoxylated	No data available		No data available	
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476	No evidence for mutagenicity, negative test results	OECD 475 (EU B.11)
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available		No data available	
alpha-hexylcinnamaldehyde	No data available		No data available	
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available		No data available	
(E)-2-Benzylideneoctanal	No data available		No data available	
d-limonene	No data available		No data available	
coumarin	No data available		No data available	
citronellol	No data available		No data available	
3(2H)-Isothiazolone, 2-octyl-	No data available		No data available	
isoeugenol	No data available		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
Triethanolamine dodecylbenzenesulfonate	No data available
Alcohols, C12-14, ethoxylated	No data available

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alcohols, C12-14, ethoxylated, sulphates, sodium salts	No evidence for carcinogenicity, weight-of-evidence
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available
alpha-hexylcinnamaldehyde	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
(E)-2-Benzylideneoctanal	No data available
d-limonene	No data available
coumarin	No data available
citronellol	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available
isoeugenol	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
Triethanolamine dodecylbenzenesulfonate			No data available				
Alcohols, C12-14, ethoxylated			No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOAEL	Developmental toxicity	> 1000	Rat	OECD 414 (EU B.31), oral		No evidence for reproductive toxicity
tetrasodium (1-hydroxy ethylidene)bisphosphonate			No data available				
alpha-hexylcinnamaldehyde			No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one			No data available				
(E)-2-Benzylideneoctanal			No data available				
d-limonene			No data available				
coumarin			No data available				
citronellol			No data available				
3(2H)-Isothiazolone, 2-octyl-			No data available				
isoeugenol			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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOAEL	> 225		OECD 408 (EU B.26)	90	
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal		No data available				
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal		No data available				
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal		No data available				
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		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
Triethanolamine dodecylbenzenesulfonate			No data available					
Alcohols, C12-14, ethoxylated			No data available					
alcohols, C12-14, ethoxylated, sulphates, sodium salts			No data available					
tetrasodium (1-hydroxy ethylidene)bisphosphonate			No data available					
alpha-hexylcinnamaldehyde			No data available					
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one			No data available					

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(E)-2-Benzylideneoctanal			No data available					
d-limonene			No data available					
coumarin			No data available					
citronellol			No data available					
3(2H)-Isothiazolone, 2-octyl-			No data available					
isoeugenol			No data available					
2-methyl-2H-isothiazol-3-one			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Triethanolamine dodecylbenzenesulfonate	No data available
Alcohols, C12-14, ethoxylated	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available
alpha-hexylcinnamaldehyde	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
(E)-2-Benzylideneoctanal	No data available
d-limonene	No data available
coumarin	No data available
citronellol	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available
isoeugenol	No data available
2-methyl-2H-isothiazol-3-one	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Triethanolamine dodecylbenzenesulfonate	No data available
Alcohols, C12-14, ethoxylated	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available
alpha-hexylcinnamaldehyde	No data available
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available
(E)-2-Benzylideneoctanal	No data available
d-limonene	No data available
coumarin	No data available
citronellol	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available
isoeugenol	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

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Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated	LC ₅₀	3	<i>Cyprinus carpio</i>		96
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LC ₅₀	7.1	<i>Fish</i>	OECD 203 (EU C.1)	96
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	LC ₅₀	1.3	<i>Lepomis macrochirus</i>	OECD 203, semi-static	96
(E)-2-Benzylideneoctanal	LC ₅₀	1.7	<i>Pimephales promelas</i>	OECD 203, flow-through	96
d-limonene	LC ₅₀	0.72	<i>Pimephales promelas</i>	OECD 203 (EU C.1)	96
coumarin		No data available			
citronellol		No data available			
3(2H)-Isothiazolone, 2-octyl-	LC ₅₀	0.122			
isoeugenol		No data available			
2-methyl-2H-isothiazol-3-one	LC ₅₀	4.77	<i>Oncorhynchus mykiss</i>	Similar to OECD 203	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated	EC ₅₀	1.9	<i>Daphnia magna Straus</i>		48
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₅₀	7.4	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	EC ₅₀	1.38	<i>Daphnia</i>	OECD 202, semi-static	48
(E)-2-Benzylideneoctanal	EC ₅₀	0.247	<i>Daphnia magna Straus</i>	OECD 202, flow-through	48
d-limonene	EC ₅₀	0.36	<i>Daphnia magna Straus</i>	OECD 202 (EU C.2)	48
coumarin		No data available			
citronellol		No data available			
3(2H)-Isothiazolone, 2-octyl-	LC ₅₀	0.181			
isoeugenol		No data available			
2-methyl-2H-isothiazol-3-one	LC ₅₀	0.93-1.9	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated	E _r C ₅₀	2.2	<i>Desmodesmus subspicatus</i>		72
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₅₀	10 - 100	<i>Pseudokirchneriella subcapitata</i>	OECD 201 (EU C.3)	72
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	EC ₅₀	> 2.6	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
(E)-2-Benzylideneoctanal	EC ₅₀	> 0.065	<i>Desmodesmus subspicatus</i>	OECD 201, static	72
d-limonene	E _r C ₅₀	150	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
coumarin		No data available			
citronellol		No data available			

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3(2H)-Isothiazolone, 2-octyl- isoeugenol	EC ₅₀	0.15			
2-methyl-2H-isothiazol-3-one	EC ₅₀	0.158	<i>Selenastrum capricornutum</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available			
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
(E)-2-Benzylideneoctanal		No data available			
d-limonene		No data available			
coumarin		No data available			
citronellol		No data available			
3(2H)-Isothiazolone, 2-octyl- isoeugenol		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
Triethanolamine dodecylbenzenesulfonate		No data available			
Alcohols, C12-14, ethoxylated		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC ₀	> 100		DIN 38412, Part 27	
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available			
alpha-hexylcinnamaldehyde		No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available			
(E)-2-Benzylideneoctanal		No data available			
d-limonene		No data available			
coumarin		No data available			
citronellol		No data available			
3(2H)-Isothiazolone, 2-octyl- isoeugenol		No data available			
2-methyl-2H-isothiazol-3-one	EC ₂₀	2.8	<i>Activated sludge</i>	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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	1 - 10	<i>Not specified</i>	OECD 203	45 day(s)	
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				

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1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal		No data available				
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	0.27	<i>Daphnia sp.</i>	OECD 211	21 day(s)	
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal	NOEC	0.063	<i>Daphnia magna</i>	OECD 211, flow-through	21 day(s)	
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		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
Triethanolamine dodecylbenzenesulfonate		No data available				
Alcohols, C12-14, ethoxylated		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate		No data available				
alpha-hexylcinnamaldehyde		No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one		No data available				
(E)-2-Benzylideneoctanal		No data available				
d-limonene		No data available				
coumarin		No data available				
citronellol		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				
isoeugenol		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

Terrestrial toxicity

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

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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
Triethanolamine dodecylbenzenesulfonate	Activated sludge, aerobe		69%	OECD 301B	Readily biodegradable
Alcohols, C12-14, ethoxylated			100% in 28 day(s)		Readily biodegradable
alcohols, C12-14, ethoxylated, sulphates, sodium salts		CO ₂ production	77-79 % in 28 day(s)	OECD 301D	Readily biodegradable
tetrasodium (1-hydroxy ethylidene)bisphosphonate				Weight of evidence	Not readily biodegradable.
alpha-hexylcinnamaldehyde					Not readily biodegradable.
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one					Not readily biodegradable.
(E)-2-Benzylideneoctanal	Activated sludge, aerobe	Oxygen depletion	97% in 28 day(s)	OECD 301F	Readily biodegradable
d-limonene			80 % in 28 day(s)	OECD 301D	Readily biodegradable
coumarin	Activated sludge, aerobe			OECD 301C	Readily biodegradable
citronellol	Activated sludge, aerobe	CO ₂ production		OECD 301F	Readily biodegradable
3(2H)-Isothiazolone, 2-octyl-				Weight of evidence	Not readily biodegradable.
isoeugenol		Oxygen depletion	79% in 28 day(s)	OECD 301F	Readily biodegradable
2-methyl-2H-isothiazol-3-one				Other	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
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 K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
Triethanolamine dodecylbenzenesulfonate	No data available			
Alcohols, C12-14, ethoxylated	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	0.3	Method not given	No bioaccumulation expected	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available			
alpha-hexylcinnamaldehyde	No data available			
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available			
(E)-2-Benzylideneoctanal	5.3	OECD 117		at 24 °C
d-limonene	No data available		High potential for bioaccumulation	
coumarin	No data available			
citronellol	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			
isoeugenol	No data available			
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	

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Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Triethanolamine dodecylbenzenesulfonate	No data available				
Alcohols, C12-14, ethoxylated	No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	< 3		Method not given	No bioaccumulation expected	
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available				
alpha-hexylcinnamaldehyde	No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available				
(E)-2-Benzylideneoctanal	No data available				
d-limonene	683.1		Method not given	High potential for bioaccumulation	
coumarin	No data available				
citronellol	No data available				
3(2H)-Isothiazolone, 2-octyl-	No data available				
isoeugenol	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 K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
Triethanolamine dodecylbenzenesulfonate	No data available				
Alcohols, C12-14, ethoxylated	No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available				
tetrasodium (1-hydroxy ethylidene)bisphosphonate	No data available				
alpha-hexylcinnamaldehyde	No data available				
1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	No data available				
(E)-2-Benzylideneoctanal	No data available				
d-limonene	No data available				High potential for mobility in soil
coumarin	No data available				
citronellol	No data available				
3(2H)-Isothiazolone, 2-octyl-	No data available				
isoeugenol	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:

European Waste Catalogue:

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.
20 01 29* - detergents containing dangerous substances.

Empty packaging

Recommendation:

Suitable cleaning agents:

Dispose of observing national or local regulations.
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)
- Regulation (EC) 648/2004 - Detergents regulation (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.**Ingredients according to Detergents Regulation**

anionic surfactants	15 - 30 %
non-ionic surfactants	5 - 15 %
phosphonates, soap	< 5 %
perfumes , Hexyl Cinnamal, Coumarin, Limonene, Alpha-Isomethyl Ionone, Citronellol, Methylisothiazolinone, Octylisothiazolinone, enzymes, optical brighteners	

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

SDS code: MS1006098**Version:** 01.1**Revision:** 2024-09-13**Reason for revision:**

This data sheet contains changes from the previous version in section(s): 3, 4, 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.

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

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- 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
- H226 - Flammable liquid and vapour.
- H301 - Toxic if swallowed.
- H302 - Harmful if swallowed.
- H304 - May be fatal if swallowed and enters airways.
- 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.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.
- EUH071 - Corrosive to the respiratory tract.

End of Safety Data Sheet