Safety Data Sheet

According to Regulation (EC) No 1907/2006

Persil Professional Biological Liquid

Revision: 2023-12-10 **Version:** 16.2

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

1.1 Product identifier

Trade name: Persil Professional Biological Liquid

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

UFI: CFM5-803P-Y00H-U2JV

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
AISE_SWED_PW_19_1
PC35-Washing and cleaning products

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

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

Hazard statements:
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
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.

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
sodium alkylbenzenesulphonate	270-115-0	68411-30-3	01-2119489428-22	Acute toxicity - Oral, Category 4 (H302) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3
Dodecan-1-ol, ethoxylated (7EO)	[4]	3055-97-8	[4]	Acute toxicity - Oral, Category 4 (H302) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3
alcohols, C12-14, ethoxylated, sulphates, sodium salts	500-234-8	68891-38-3	01-2119488639-16	Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	270-116-6	68411-31-4	-	Acute toxicity - Oral, Category 4 (H302) Skin irritation, Category 2 (H315) Serious eye damage, Category 1 (H318) Chronic aquatic toxicity, Category 3 (H412)		1-3
2-methyl-2H-isothiazol-3-one	220-239-6	2682-20-4	[6]	Acute toxicity - Inhalation, Category 2 (H330) Acute toxicity - Oral, Category 3 (H301) Acute toxicity - Dermal, Category 3 (H311) Skin corrosion, Category 1B (H314) Serious eye damage, Category 1 (H318) Skin sensitisation, Sub-category 1A (H317) Acute aquatic toxicity, Category 1 M=10 (H400) Chronic aquatic toxicity, Category 1 M=1 (H410)		< 0.01
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

Specific concentration limits
2-methyl-2H-isothiazol-3-one:
• Skin sensitisation, Category 1 (H317) >= 0.0015%
3(2H)-Isothiazolone, 2-octyl-:
• Skin sensitisation, Category 1 (H317) >= 0.0015%

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

SECTION 4: First aid measures

4.1 Description of first aid measures

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.

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. Rinse cautiously with water for several 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:	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
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.
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 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.

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
sodium alkylbenzenesulphonate	-	-	-	0.425
Dodecan-1-ol, ethoxylated (7EO)	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	15
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	0.027
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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)
sodium alkylbenzenesulphonate	-	-	-	119
Dodecan-1-ol, ethoxylated (7EO)	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	2750
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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)
sodium alkylbenzenesulphonate	-	-	-	42.5
Dodecan-1-ol, ethoxylated (7EO)	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	1650
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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
sodium alkylbenzenesulphonate	-	-	-	6
Dodecan-1-ol, ethoxylated (7EO)	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	175
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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
sodium alkylbenzenesulphonate	-	-	-	1.5
Dodecan-1-ol, ethoxylated (7EO)	No data available	No data available	No data available	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	-	-	-	52
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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)
sodium alkylbenzenesulphonate	0.268	0.0268	0.0167	3.43
Dodecan-1-ol, ethoxylated (7EO)	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
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
sodium alkylbenzenesulphonate	8.1	6.8	35	-
Dodecan-1-ol, ethoxylated (7EO)	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	-
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available	No data available	No data available	No data available
2-methyl-2H-isothiazol-3-one	-	-	-	-
3(2H)-Isothiazolone, 2-octyl-	No data available	No data available	No data available	No data available

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): 1

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
Manual application	AISE_SWED_PW_19_1	PW	PROC 19	480	ERC8a
Automatic application in a dedicated system	AISE_SWED_PW_4_1	PW	PROC 4	480	ERC8a

Personal protective equipment
Eye / face protection: 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: Hazy , Dark , Green Blue
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)
sodium alkylbenzenesulphonate	No data available		
Dodecan-1-ol, ethoxylated (7EO)	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	> 100	Method not given	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available		
2-methyl-2H-isothiazol-3-one	No data available		
3(2H)-Isothiazolone, 2-octyl-	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

Substance data, flammability or explosive limits, if available:

Method / remark

Autoignition temperature: Not determined
Decomposition temperature: Not applicable.
pH: ≈ 8 (neat) — ISO 4316
Dilution pH: ≈ 8 (1 %) — 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)
sodium alkylbenzenesulphonate	> 250		
Dodecan-1-ol, ethoxylated (7EO)	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	280 Soluble	Method not given	20
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available		
2-methyl-2H-isothiazol-3-one	No data available		
3(2H)-Isothiazolone, 2-octyl-	No data available		

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

Method / remark

Vapour pressure: Not determined — See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
sodium alkylbenzenesulphonate	No data available		
Dodecan-1-ol, ethoxylated (7EO)	No data available		
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available		
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available		
2-methyl-2H-isothiazol-3-one	No data available		
3(2H)-Isothiazolone, 2-octyl-	No data available		

Method / remark

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

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

9.2.2 Other safety characteristics
No other relevant information available.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability
Stable under normal storage and use conditions.

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

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

10.5 Incompatible materials
None known under normal use conditions.

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

SECTION 11: Toxicological information

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

Mixture data: .

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

Eye irritation and corrosivity
Result: Eye irritant 2 **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)
sodium alkylbenzenesulphonate	LD_{50}	1080	Rat	OECD 401 (EU B.1)		1080
Dodecan-1-ol, ethoxylated (7EO)	LD_{50}	> 500 - <2000	Rat	Method not given		Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD_{50}	> 2000	Rat	OECD 401 (EU B.1)		Not established
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				Not established
2-methyl-2H-isothiazol-3-one	LD_{50}	120	Rat	OECD 401 (EU B.1)		120
3(2H)-Isothiazolone, 2-octyl-		No data available				125

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE Dermal (mg/kg)
sodium alkylbenzenesulphonate	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)		Not established
Dodecan-1-ol, ethoxylated (7EO)		No data available				Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LD_{50}	> 2000	Rat	OECD 402 (EU B.3)		Not established
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds		No data				Not established

with triethanolamine		available				
2-methyl-2H-isothiazol-3-one	LD_{50}	242	Rat	OECD 402 (EU B.3)	24 hours	242
3(2H)-Isothiazolone, 2-octyl-		No data available				311

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts		5.71			
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one	LC_{50}	(mist) 0.11	Rat	OECD 403 (EU B.2)	4 hours
3(2H)-Isothiazolone, 2-octyl-		No data available			

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)
sodium alkylbenzenesulphonate	Not established	Not established	Not established	Not established
Dodecan-1-ol, ethoxylated (7EO)	Not established	Not established	Not established	Not established
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Not established	Not established	Not established	Not established
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	Not established	Not established	Not established	Not established
2-methyl-2H-isothiazol-3-one	Not established	0.11	Not established	Not established
3(2H)-Isothiazolone, 2-octyl-	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
Dodecan-1-ol, ethoxylated (7EO)	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Irritant	Rabbit	OECD 404 (EU B.4)	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available			
2-methyl-2H-isothiazol-3-one	Corrosive			
3(2H)-Isothiazolone, 2-octyl-	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	Corrosive	Rabbit	OECD 405 (EU B.5)	
Dodecan-1-ol, ethoxylated (7EO)	Severe damage			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Severe damage	Rabbit	OECD 405 (EU B.5)	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available			
2-methyl-2H-isothiazol-3-one	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	Not irritating to respiratory tract			
Dodecan-1-ol, ethoxylated (7EO)	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available			
2-methyl-2H-isothiazol-3-one	No data available			
3(2H)-Isothiazolone, 2-octyl-	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Dodecan-1-ol, ethoxylated (7EO)	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with	No data available			

triethanolamine				
2-methyl-2H-isothiazol-3-one	Sensitising	Guinea pig		
3(2H)-Isothiazolone, 2-octyl-	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
Dodecan-1-ol, ethoxylated (7EO)	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available			
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available			
2-methyl-2H-isothiazol-3-one	No data available			
3(2H)-Isothiazolone, 2-octyl-	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)
sodium alkylbenzenesulphonate	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 476 OECD 473	No data available	
Dodecan-1-ol, ethoxylated (7EO)	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)
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	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	
3(2H)-Isothiazolone, 2-octyl-	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium alkylbenzenesulphonate	No data available
Dodecan-1-ol, ethoxylated (7EO)	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No evidence for carcinogenicity, weight-of-evidence
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available
2-methyl-2H-isothiazol-3-one	No data available
3(2H)-Isothiazolone, 2-octyl-	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
sodium alkylbenzenesulphonate	NOAEL	Teratogenic effects	300	Rat	Non guideline test		No known significant effects or critical hazards
Dodecan-1-ol, ethoxylated (7EO)			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
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine			No data available				
2-methyl-2H-isothiazol-3-one			No data available				
3(2H)-Isothiazolone, 2-octyl-			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
sodium alkylbenzenesulphonate		No data available				
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOAEL	> 225		OECD 408 (EU B.26)	90	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				

3(2H)-Isothiazolone, 2-octyl-		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
sodium alkylbenzenesulphonate		No data available				
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
3(2H)-Isothiazolone, 2-octyl-		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
sodium alkylbenzenesulphonate		No data available				
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
3(2H)-Isothiazolone, 2-octyl-		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
sodium alkylbenzenesulphonate			No data available					
Dodecan-1-ol, ethoxylated (7EO)			No data available					
alcohols, C12-14, ethoxylated, sulphates, sodium salts			No data available					
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine			No data available					
2-methyl-2H-isothiazol-3-one			No data available					
3(2H)-Isothiazolone, 2-octyl-			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	Not applicable
Dodecan-1-ol, ethoxylated (7EO)	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available
2-methyl-2H-isothiazol-3-one	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	Not applicable
Dodecan-1-ol, ethoxylated (7EO)	No data available
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available
2-methyl-2H-isothiazol-3-one	No data available
3(2H)-Isothiazolone, 2-octyl-	No data available

Aspiration hazard

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

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

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

11.2.2 Other information
No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture .

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

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	LC_{50}	1.67	*Fish*	EPA-OPPTS 850.1075	96
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	LC_{50}	7.1	*Fish*	OECD 203 (EU C.1)	96
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one	LC_{50}	4.77	*Oncorhynchus mykiss*	Similar to OECD 203	96
3(2H)-Isothiazolone, 2-octyl-	LC_{50}	0.122			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	LC_{50}	2.9	*Daphnia*	OECD 202 (EU C.2)	48
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC_{50}	7.4	*Daphnia magna Straus*	OECD 202 (EU C.2)	48
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one	LC_{50}	0.93-1.9	*Daphnia magna Straus*	Method not given	48
3(2H)-Isothiazolone, 2-octyl-	LC_{50}	0.181			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	$E_b C_{50}$	47.3	*Not specified*	Non guideline test	72
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC_{50}	10 - 100	*Pseudokirchneriella subcapitata*	OECD 201 (EU C.3)	72
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one	EC_{50}	0.158	*Selenastrum capricornutum*	Method not given	72
3(2H)-Isothiazolone, 2-octyl-	EC_{50}	0.15			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium alkylbenzenesulphonate		No data available			
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available			
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one		No data			

		available			
3(2H)-Isothiazolone, 2-octyl-		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium alkylbenzenesulphonate	EC_{50}	550	*Bacteria*	OECD 209	3 hour(s)
Dodecan-1-ol, ethoxylated (7EO)		No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	EC_{0}	> 100		DIN 38412, Part 27	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available			
2-methyl-2H-isothiazol-3-one	EC_{20}	2.8	*Activated sludge*	OECD 209	3 hour(s)
3(2H)-Isothiazolone, 2-octyl-		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate	NOEC	0.23	*Oncorhynchus mykiss*	Method not given	72 day(s)	
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	1 - 10	*Not specified*	OECD 203	45 day(s)	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
3(2H)-Isothiazolone, 2-octyl-		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate	NOEC	1.41	*Daphnia magna*	OECD 211		
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	NOEC	0.27	*Daphnia sp.*	OECD 211	21 day(s)	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
3(2H)-Isothiazolone, 2-octyl-		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
sodium alkylbenzenesulphonate		No data available				
Dodecan-1-ol, ethoxylated (7EO)		No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts		No data available				
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine		No data available				
2-methyl-2H-isothiazol-3-one		No data available				
3(2H)-Isothiazolone, 2-octyl-		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
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO_2 production	85 % in 28 day(s)	OECD 301B	Readily biodegradable
Dodecan-1-ol, ethoxylated (7EO)					Readily biodegradable
alcohols, C12-14, ethoxylated, sulphates, sodium salts		CO_2 production	77-79 % in 28 day(s)	OECD 301D	Readily biodegradable
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine					Readily biodegradable
2-methyl-2H-isothiazol-3-one				Other	Readily biodegradable
3(2H)-Isothiazolone, 2-octyl-				Weight of evidence	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
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
sodium alkylbenzenesulphonate	3.32	Method not given	Low potential for bioaccumulation	
Dodecan-1-ol, ethoxylated (7EO)	No data available			
alcohols, C12-14, ethoxylated, sulphates, sodium salts	0.3	Method not given	No bioaccumulation expected	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available			
2-methyl-2H-isothiazol-3-one	-0.32	OECD 107	No bioaccumulation expected	
3(2H)-Isothiazolone, 2-octyl-	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	2-1000		Method not given	High potential for bioaccumulation	
Dodecan-1-ol, ethoxylated (7EO)	No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	< 3		Method not given	No bioaccumulation expected	
Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available				
2-methyl-2H-isothiazol-3-one	3.16		OECD 305		
3(2H)-Isothiazolone, 2-octyl-	No data available				

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
sodium alkylbenzenesulphonate	No data available				
Dodecan-1-ol, ethoxylated (7EO)	No data available				
alcohols, C12-14, ethoxylated, sulphates, sodium salts	No data available				

Benzenesulfonic acid, C10-13-alkyl derivatives, compounds with triethanolamine	No data available				
2-methyl-2H-isothiazol-3-one	No data available				
3(2H)-Isothiazolone, 2-octyl-	No data available				

12.5 Results of PBT and vPvB assessment
Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties
Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects
No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

European Waste Catalogue: 20 01 29* - detergents containing dangerous substances.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

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

SECTION 14: Transport information

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

14.1 UN number or ID number: Non-dangerous goods
14.2 UN proper shipping name: Non-dangerous goods
14.3 Transport hazard class(es): Non-dangerous goods
14.4 Packing group: Non-dangerous goods
14.5 Environmental hazards: Non-dangerous goods
14.6 Special precautions for user: Non-dangerous goods
14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

SECTION 15: Regulatory information

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

National regulations :
- Regulation (EC) 1907/2006 - REACH (UK amended)
- Regulation (EC) 1272/2008 - CLP (UK amended)
- 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	5 - 15 %
non-ionic surfactants, soap, polycarboxylates	< 5 %
perfumes , optical brighteners, Limonene, Citronellol, Methylisothiazolinone, enzymes, Octylisothiazolinone	

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: MSDS5812 **Version:** 16.2 **Revision:** 2023-12-10

Reason for revision:
Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 4, 8, 9, 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
• LCS - Life cycle stage
• LD50 - Lethal Dose, 50% / Median Lethal dose
• NOAEL - No observed adverse effect level
• NOEL - No observed effect level
• OECD - Organisation for Economic Cooperation and Development
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative
• H301 - Toxic if swallowed.
• H302 - Harmful if swallowed.
• H311 - Toxic in contact with skin.
• H314 - Causes severe skin burns and eye damage.
• H315 - Causes skin irritation.
• H317 - May cause an allergic skin reaction.
• H318 - Causes serious eye damage.
• H330 - Fatal if inhaled.
• H400 - Very toxic to aquatic life.
• H410 - Very toxic to aquatic life with long lasting effects.
• H412 - Harmful to aquatic life with long lasting effects.

End of Safety Data Sheet